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THE CLASSICAL QUARTERLY

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II. THE PHILAIDS AND THE CHERSONESE

1. THE THREE BEARERS OF THE NAME 'MILTIADES'

THE discovery of the inscription with the name of [M]iltiades, which confirmed the statement in Dionysius Halicarnassensis 7. 3. 1 that a Miltiades was archon at Athens in 524/3, prompts a reconsideration of the problems presented by the accounts in Herodotus and in Marcellinus *Life of Thucydides* concerning the Philaid family. To the question, who is this Miltiades, the following answers have been given. 'He is not a Philaid.' The objection to this answer is that the Peisistratids either occupied the archonship themselves or gave it to members of leading families, such as Cleisthenes the Alcmeonid in 525/4; if then this Miltiades was a member of a leading family, he is almost certainly a member of the Philaid family.¹ 'He is the elder Miltiades who founded the settlement in the Chersonese.' In Herodotus' account (6. 34-37) Miltiades left Athens, where he was already powerful, at the beginning of a tyranny by Peisistratus; then after several operations in the Chersonese Miltiades was rescued by Croesus. The year in which Miltiades left Athens was either 561/0 or 556/5 and almost certainly the latter; for in 561/0 Croesus was not on the throne. The year 546 may be excluded; for in 546 autumn and winter Croesus had neither the time nor the opportunity to concern himself with Miltiades, since Cyrus was then at war with Lydia and seized Sardis.² If Miltiades was powerful in 556/5, he was at that date no youngster but at least in his thirties—a man born say c. 590. In 524/3, being well on in his sixties and having spent thirty years and more in the Chersonese (for Herodotus does not suggest that he ever came back to Athens), this Miltiades is unlikely to have been the eponymous archon. We conclude, then, that the archon Miltiades in 524/3 was a different and younger Miltiades. Having cleared the ground on these two points, I turn to the central problem, whether there were two men called Miltiades, one born c. 590 and the other the general who died of a wound soon after 489, or whether there were three men called Miltiades, one of whom was in a generation intermediate between Miltiades born c. 590 and Miltiades dead c. 489.³ Either solution is chronologically possible.

The problem arises because there are conflicting statements in the ancient authorities. Some of these statements contain lacunae or are thought to be corrupt. I begin by taking three statements which seem to cohere and contain no lacunae or signs of corruption.

(1) Hdt. 6. 103. 4 *ὁ μὲν δὴ πρεσβύτερος τῶν παίδων τῷ Κίμωνι Στσαγόρης ἦν τηλικαῦτα παρὰ τῷ πατρὶ Μιλτιάδῃ τρεφόμενος ἐν τῇ Χερσονήσῳ, ὁ δὲ νεώτερος παρ' αὐτῷ Κίμωνι Ἀθήνησι οὖνομα ἔχων ἀπὸ τοῦ οἰκιστέως τῆς Χερσονήσου Μιλτιάδῳ Μιλτιάδης.* 'The elder of Cimon's sons, Stesagoras, was at the time (i.e.

¹ In Kirchner, *Prosopographia Attica*, no early Miltiades with a deme-title fails to come from the Philaid deme, Laciadae.

² Hdt. 1. 76-77: after a campaign in Cappadocia Croesus was brought to battle and returned home, arriving five months before the spring of 545; Sardis fell later in the winter. For the date of the fall of Sardis,

see my article in *Historia* iv (1955), p. 394.

³ Various reconstructions of the Philaid stemma are given by Beloch, *G.G.* ii. 2. 43 (1931); Obst, in *R.E.*, 'Miltiades' 1679 (1932); Berve, 'Miltiades' in *Hermes Einzelschr.* ii. 4 (1937); and Schachermeyer, in *R.E.*, 'Philaidai' 2119 (1938).

of Cimon's death) with his uncle Miltiades in the Chersonese where he was being brought up, while the younger son, Miltiades, so named after Miltiades founder of the Chersonese, was with Cimon himself in Athens.' In normal English 'the uncle Miltiades' is not the same person as 'Miltiades founder of the Chersonese'; but in a trick of modern journalism he might be. In Greek, however, one does not refer to the same person in the same sentence under different appellations.¹ Herodotus, therefore, gives us three Miltiadae: Miltiades I founder of the Chersonese, Miltiades II the uncle of Stesagoras, and Miltiades III son of Cimon.

(2) Aelian, *V.H.* 12. 35 (mentioning famous persons of the same name) *καὶ Μιλτιάδαι τρεῖς, ὁ τὴν Χερρόνησον κτίσας καὶ ὁ Κυβέλου καὶ ὁ Κίμωνος*. 'Three Miltiadae, the founder of Cherronesus, and the son of Cypselus and the son of Cimon.' The source of Aelian's information² was probably the passage in Herodotus which we have just quoted. Moreover, the Miltiadae are cited by Aelian in the same order as they are cited in Herodotus—which is not the chronological order. For the son of Cypselus is Miltiades I who first led settlers to the Chersonese (Hdt. 6. 34. 1 and 35. 1); the son of Cimon is Miltiades III; and 'he who founded Cherronesus' is Miltiades II. The order of mention in Herodotus and in Aelian is II, I, and III. A further point emerges: Miltiades I settled the Chersonese (Hdt. 6. 103. 4), and Miltiades II founded the city Cherronesus (Aelian, *V.H.* 12. 35). In a sense both might be called 'founders'.

(3) Marcellinus, *V.Th.* 8–10, mentions Miltiades 'oecist of the Chersonese', that is Miltiades I, as the context shows; an unnamed son of Miltiades; Stesagoras; and Miltiades, full brother of Stesagoras, that is to say the son of Cimon, our Miltiades III. When he mentions this last Miltiades, he comments *Μιλτιάδης ὁμώνυμος μὲν τῷ πρώτῳ οἰκιστῇ*. Now the phrase *ὁ πρώτος οἰκιστής* 'the first founder' is not a pleonasm, as it might be in English; for *οἰκιστής* is a common word and, so far as I can trace, is not coupled with *πρώτος* pleonastically. The meaning then is that there was more than one so-called 'oecist'; and the remark has point only if both the first 'oecist' and a later 'oecist' were called Miltiades. In section 12 Marcellinus quotes Herodotus for the later history of Miltiades III. It is therefore probable that Marcellinus used Herodotus for the preceding sections; and this becomes the more probable when we note that both Herodotus and Marcellinus derive the name of Miltiades III from the Miltiades who settled the Chersonese, that is Miltiades I.

If I am correct in my interpretation of these three passages, it follows that Aelian and Marcellinus had the same text as we have at Hdt. 6. 103. 4 and interpreted it in the same way as I do. Nor was Herodotus alone in regarding Miltiades I as the settler of the Chersonese; Pherecydes³ described this Miltiades as *Μιλτιάδης ὃς ᾤκισε Χερρόνησον* (Marcellinus, *V.Th.* 3), and Hellanicus is cited as supporting the excerpt from Pherecydes. When I suggest that

¹ Even in Greek Epic, which rejoices in epithets and periphrases, I do not think this journalistic trick is used in the same sentence. H. Berve, loc. cit. 5 with n. 6, seems to assume that Miltiades the uncle and Miltiades the founder are the same person, but he does not discuss Greek usage. It may be suggested that the passage is corrupt; but the suggestion is hard to accept when the sentence is so neatly constructed with in-

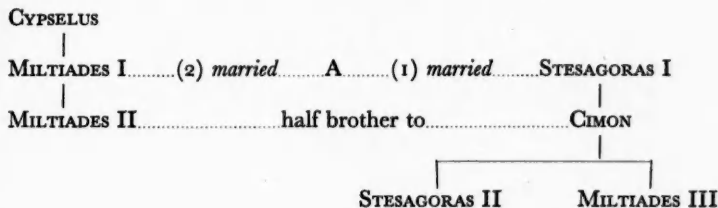
ternal contrasts.

² Kirchner, *Attische Genealogie*, 280 n. 1, dismisses this passage in Aelian as 'unrichtig'. But Aelian is citing well-known triads, and it is difficult to see how he could make so glaring an error. In the preceding words Aelian mentions two Perianders; Kirchner can hardly dismiss that as a mistake, because Aristotle mentions two Perianders (Fr. 517).

³ *F.Gr.H.* 3 F 2.

Miltiades II founded a city Cherronesus, the existence of such a city is known from Hecataeus (*F.Gr.H.* 1 F 163 *ἐν δ' αὐτοῖσι πόλις Χερρονήσος ἐν τῷ ἰσθμῷ τῆς Χερρονήσου*).¹ It should at this point be noted that the peninsula and the town are spelt equally Chersonesus and Cherronesus; I have used the word Cherronesus for the peninsula and the word Cherronesus for the town simply in order to avoid confusion in the English mind.

What was the relationship of Miltiades II to Miltiades I? Marcellinus, *V.Th.* 9 ἀποθανόντος δὲ τοῦ παιδὸς αὐτοῦ διαδέχεται τὴν ἐν Χερρονήσῳ ἀρχὴν Στησαγόρας makes the answer plain. When the son of Miltiades I (= αὐτοῦ) died, Stesagoras succeeded. This son, who succeeded Miltiades I and preceded Stesagoras, is the Miltiades II, 'the uncle' with whom Stesagoras was being brought up in the Chersonese. As we know that Stesagoras and Miltiades III were brothers one of the other and grandsons of a Stesagoras, and that Miltiades II was paternal uncle to Stesagoras,² we can fix their relationship as follows:



Miltiades II as paternal uncle of Stesagoras II was the brother of Cimon; but Miltiades II and Cimon had different fathers. It follows that they had the same mother and were half-brothers on the mother's side. In accordance with my stemma when Herodotus at 6. 103. 2 relates that Cimon won a victory like ὁ ὁμομήτριος ἀδελφεὸς Μιλτιάδης, he refers to Miltiades II and not to Miltiades ὁ Κυψέλου, that is Miltiades I, who had also won a victory (*Hdt.* 6. 36. 1).³

The remaining passages are as follows. *Hdt.* 6. 38 (having mentioned Miltiades I) οὗτος μὲν δὴ διὰ Κροῖσον ἐκφεύγει, μετὰ δὲ τελευτᾷ ἄπαις, τὴν ἀρχὴν τε καὶ τὰ χρήματα παραδούς Στησαγόρῃ τῷ Κίμωνος ἀδελφεοῦ παιδί ὁμομητρίῳ. 'Miltiades I then escaped thanks to Croesus; but thereafter he dies childless, having transferred⁴ the position and the revenue to Stesagoras the son of Cimon, Cimon being his half-brother on the maternal side.' The word παιδί was deleted by Cobet and has therefore been bracketed by Hude in the Teubner and Oxford texts; it is not bracketed by Legrand in the Budé edition. There are no grounds in the textual transmission or in the sense for rejecting the word. The meaning is clear. Stesagoras was the son of Cimon, and this Cimon was half-brother on his mother's side to the subject of παραδούς. Now Cimon had a half-

¹ Cherronesus appears as a 'polis' also in the Scholiast to *Ar. Eq.* 262.

² *Hdt.* 6. 103. 1 and 4.

³ Those who maintain that there were only two Miltiadae see the same person as victor at *Hdt.* 6. 103. 2 and 6. 36. 1; if so, it is surprising that Herodotus did not name him in each case as the son of Cypselus, his usual appellation of Miltiades I. But the objection to their case lies in the three pas-

sages with which I began this article.

⁴ Two codices read μετὰ; seven read μετὰ ταῦτα. As Hude and Budé read the former, I give it here.

⁵ The aorist tense may mean that before his death the subject of the sentence associated Stesagoras with him and handed over authority before his decease; the same phrase occurs at *Hdt.* 2. 159.

brother Miltiades, who is described by Hdt. 6. 103. 2 as *ὁ δὲ ὁμομήτριος ἀδελφεὸς Μιλτιάδης*. The subject, then, of *παραδοῖς* is a Miltiades. Let us leave aside the question whether he is Miltiades I or Miltiades II. Marcellinus *V.Th.* 8-9 (having described the oracle which caused Miltiades I to set out) *οὗτος οὖν ἡγούμενος ἐπλήρωσε τὰ μεμαντευμένα, καὶ μετὰ τὴν νικὴν γίνεσθαι καὶ Χερρονήσου οἰκιστῆς. ἀποθανόντος δὲ τοῦ παιδὸς αὐτοῦ διαδέχεται τὴν ἐν Χερρονήσῳ ἀρχὴν Στσαγόρας ὁ . . . ἀδελφὸς ὁμομήτριος. ἀποθανόντος δὲ καὶ τούτου διαδέχεται τὴν ἀρχὴν Μιλτιάδης ὁμώνυμος μὲν τῷ πρώτῳ οἰκιστῇ ἀδελφὸς δὲ Στσαγόρου ὁμομήτριος καὶ ὁμοπάτριος*. As we have seen above it is practically certain that Marcellinus is abstracting from Herodotus; and, in describing the intricate relationships of the family, Marcellinus makes the same points as Herodotus, namely that Stesagoras had a uterine relationship to his predecessor in office, that Miltiades III was full brother to Stesagoras, and that Miltiades III was named after the oecist. In the lacuna, then, Marcellinus presumably said what Herodotus said, namely that Stesagoras was nephew to the Miltiades who brought him up in the Chersonese (Hdt. 6. 103. 4) and to whom he succeeded. The lacuna has room for 'almost 9 letters'. If a restoration has to be attempted, the following may suffice. (1) *ὁ [Κίμωνος ἐξ] ἀδελφὸς ὁμομήτριος*. 'Stesagoras, son of Cimon, nephew to Miltiades II through his mother.' The word *ἐξ ἀδελφός*, meaning 'nephew', occurs in Josephus and in the Septuagint, of which the Greek dialect is rather earlier than the Greek of Marcellinus; the link between Miltiades II and Stesagoras lies in the mother of the former being the grandmother of the latter; (2) *ὁ Κίμωνος ὃς ἀδελφὸς ὁμομήτριος* or (3) *ὁ Κίμωνος ὡς ἀδελφοῦ ὁμομητρίου*. 'Stesagoras, son of Cimon, who was half-brother to Miltiades II', or 'Miltiades II's successor was Stesagoras son of Cimon, because Cimon was half-brother to Miltiades II.' But, whether we restore or not, we should be guided by the intact passage in Hdt. 6. 103. 4.

We now come to the heart of the problem. Hdt. 6. 38 states that Miltiades, that is Miltiades I, died 'childless' and was succeeded by Stesagoras. This clashes with two passages, which we have considered. According to Hdt. 6. 103. 4, when Cimon died Stesagoras was with his uncle Miltiades in the Chersonese, where he was being brought up, this uncle being a different person from Miltiades I the founder; Miltiades I, then, was not ruler of the Chersonese at the time when Stesagoras, not yet being the ruler, was being brought up there with Miltiades II, who presumably was ruler. In Marcellinus, *V.Th.* 9-10, Miltiades I had a son and on that son's death Stesagoras succeeded; here the succession seems to be Miltiades I, then his son, then Stesagoras. Moreover Marcellinus, as we have seen, was almost certainly drawing directly on Herodotus' text. Thus we have two passages, which are incompatible with Hdt. 6. 38. The odds being two to one, it is wisest to emend Hdt. 6. 38, by assuming a diplography of alpha or a misreading of omicron, so as to read *μετὰ δὲ τελευτᾷ ὁ παῖς*. Following this reading, Marcellinus wrote *ἀποθανόντος τοῦ παιδὸς αὐτοῦ*.² The contrast then is between *οὗτος μὲν* (Miltiades I) and *μετὰ*

¹ L.S.J. s.v.; Hude in Teubner ed. 'post ὁ in E spatium novem fere litt.'; E is the earliest and main codex.

² Casaubon, working the other way, emended the words of Marcellinus to read for *τοῦ παιδὸς* the word *ἀπαῖδος*. It is hard to explain a corruption of *τοῦ* to *α*; and, if one does so, it still remains necessary to change

Hdt. 6. 103. 4. The fact that Marcellinus cited the family tree of the Philaids so far only as Miltiades I does not show that Miltiades I had no children. We do not know at what date Pherecydes closed his work. In any case Marcellinus only quotes Pherecydes to indicate that Thucydides, being descended from the general Miltiades, came of a noble

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δὲ . . . ὁ παῖς (Miltiades II), who handed on his power later to his nephew Stesagoras. Or we may go further and suggest μετὰ δὲ τελευτῇ ὁ παῖς ἀπαῖς, where the juxtaposition of the similar words might cause ὁ παῖς to fall out.¹ This reading gives added force to Hdt. 6. 38. 2 καὶ Στησαγόρεα κατέλαβε ἀποθανεῖν ἀπαῖδα, if it is thought that καὶ emphasizes not the fact that Stesagoras 'also died' but that he 'also died childless'. But, whichever reading is preferred, Miltiades II emerges as the man to whom the Chersonesitae paid honour; and this is natural, since according to Aelian he founded the city Cherronesus, their capital.

2. THE RULERS OF THE CHERSONESE

We can now summarize the succession of rulers in the Chersonese and add chronological details to the stemma. Miltiades I, δὲ ᾤκισε Χερρόνησον (Pherecydes in Marcellinus *V.Th.* = *F.Gr.H.* 3 F 2), was ὁ οἰκιστὴς τῆς Χερσονήσου to Herodotus (6. 103. 4), *Χερρονήσου οἰκιστὴς* and ὁ πρῶτος οἰκιστὴς to Marcellinus (8 and 10). He brought a number of Athenian volunteers to settle in the Chersonese at the outset (Hdt. 6. 36. 2). His father was 'Cypselus' according to Herodotus and 'Hippocleides' according to Pherecydes; probably, like one of Peisistratus' sons, he had a 'paronym', having discarded the name Cypselus, when the Cypselids fell with contumely in 582. Miltiades I was succeeded by his son Miltiades II. It was this Miltiades to whom on his death the Chersonesitae sacrificed 'as one might sacrifice to a founder' ὡς νόμος οἰκιστῇ (Hdt. 6. 38. 1),² and with whom Marcellinus drew an implicit contrast in calling Miltiades I ὁ πρῶτος οἰκιστὴς (*V.Th.* 10).

Victories in the chariot-race at Olympia were won by Miltiades I (Hdt. 6. 36. 1) c. 560³ and by Miltiades II (Hdt. 6. 103. 2). The latter's half-brother Cimon won three successive victories with the same mares in the chariot-race at Olympia in 532, 528, and 524,⁴ and was murdered at the secret instigation of the Peisistratids very soon after his third victory, presumably because it heightened his popularity to a dangerous degree (Hdt. 6. 103. 3). Cimon died,

family going back to Aeacus, son of Zeus; his purpose was served when he reached Miltiades I, for everyone knew that Miltiades and Cimon, 'those most famous generals', were descended from Miltiades I (2). Finally Marcellinus himself states that Miltiades I had a son (9-10).

¹ Professor A. D. Nock made this suggestion during a conversation with me.

² Hdt. says not that the Chersonesitae sacrificed to him as the founder ὡς οἰκιστῇ, but that they sacrificed to him 'as the custom is in the case of a founder'. I cannot find a parallel in Herodotus, and I doubt whether the distinction in meaning is very significant in itself; but the words are not the same as in Hdt. 6. 103. 4 and Marcellin. *V.Th.* 10.

³ Förster, G. H., *Die olympische Sieger*, p. 8.

⁴ Since the mares are more likely to have been in form for eight than for twelve years, we may assume that the victories were successive. As Herodotus tells the story, on the occasion of the first victory Cimon was in

exile; on the occasion of the second he allowed Peisistratus to be proclaimed victor and secured his own recall; and on the occasion of the third or soon after it he was murdered by the Peisistratids, Peisistratus himself being no longer alive. We know that Peisistratus was alive at the beginning of the Attic archon-year 528/7 (for he died during the course of its twelve months), and the Olympic Games were held usually a fortnight after the beginning of the Attic archon-year. The odds are therefore high that Peisistratus was alive at the time of the Olympic Games of 528, and that, if Cimon's murder followed close on the proclamation of that victory, Peisistratus would have been responsible. Therefore I think it more reasonable to place Cimon's third victory in 524 with Förster, op. cit., p. 9, than in 528 with T. J. Cadoux, *J.H.S.* lxxviii. 110 n. 217, and H. T. Wade-Gery, *J.H.S.* lxxi. 214. I am grateful to Cadoux for a discussion of this matter with me.

then, in 524/3 and was buried beside the 'Melitid gates' near the Hollow Way (Hdt. *ibid.*; Marcellin. *V.Th.* 17); his four mares were buried in the Ceramicus by Miltiades III (Aelian, *Hist. An.* 12. 40) probably on this same occasion, since it is likely the mares were killed and buried together and were not interred separately as each died in the course of nature. It may be assumed that Miltiades III conducted the burial of Cimon as well as the interment of the mares; for this assumption explains the abruptness with which Herodotus 6. 103. 4 passes from the burial of Cimon and his mares to the statement that, while Stesagoras was with Miltiades II in the Chersonese, Miltiades III was with Cimon in Athens. In this very year 524/3 a Miltiades was eponymous archon at Athens, and he is to be identified almost certainly with Miltiades III. In this year Miltiades II, his uncle, was in the Chersonese as ruler and was bringing up Cimon's elder son in the Chersonese to be his successor.¹ The fact that Miltiades III was in Athens explains why he and not the elder son conducted the burial of the mares; and the fact that he was archon makes it easier to understand why Herodotus knew his whereabouts at the time of the burial and why Aelian knew that Miltiades buried the mares.

Miltiades II then was ruler in the Chersonese in 524/3. He was succeeded by Stesagoras, who was murdered during a war with Lampascus. In view of this war, rather than the earlier one in the rule of Miltiades I, the Lampascenes were excluded from the games in honour of Miltiades II. On the murder of Stesagoras the Peisistratids sent out Miltiades III, who by a *coup d'état* seized the local dynasts, engaged 500 mercenaries, and married Hegesipyle, daughter of the Thracian king, Olorus. These events are narrated as a group in one sentence (Hdt. 6. 39. 2) and evidently fall before 514/13, the year in which, when Darius invaded Scythia, Miltiades III was at the bridge over the Danube.² Miltiades III, then, married Hegesipyle before 514/13. Marcellinus (*V.Th.* 11) says that Miltiades III already had sons by his Athenian wife at the time of this marriage; and Herodotus 6. 41. 2 describes as the son of a wife other than Hegesipyle the oldest boy of Miltiades III, namely Metiochus, who commanded a ship in 494/3 when his father fled from the Chersonese. As Metiochus was the eldest of at least two sons born before the marriage to Hegesipyle, itself dated to before 514/13, he was born around 520. He was thus about 27 years old when he held the command in 494/3; he married a Persian wife soon afterwards. We conclude, then, that Miltiades III was archon 524/3, was married about 522 to an Athenian woman, and went to the Chersonese about 516.

Miltiades III had a chequered career in the Chersonese, which Herodotus records in a typical manner. At 6. 34 he uses τότε to mean the time of the Phoenician fleet's approach in 494/3, and at 6. 40. 1, having recounted the *coup d'état*, etc., by Miltiades III which we date c. 516, he recapitulates. 'Indeed this Miltiades, son of Cimon, had just come to the Chersonese; on his arrival a worse situation overtook him than the situation (later) obtaining. For in the third year of that (worse) situation³ he fled before the nomadic Scythians, who, stimulated by Darius' attack, united and invaded up to this part of the Cher-

¹ That the word *τρεφόμενος* in Hdt. 6. 103. 4 may be used of an adult, is clear from the passage in Hdt. 1. 130. 3 where the career of Cyrus up to and including the capture of Astyages is summarized in the words οὕτω δὲ Κύρος γενόμενος τε καὶ τρεφόμενος; compare the entries III-V for *τρέφω* in L.S.J.

² For the date of Darius' invasion of Scythia see my article in *Historia* iv (1955), p. 394.

³ Stein stultifies the whole passage by adding *πρὸ* before *τούτων*. No codex has *πρὸ*. Legrand follows Stein; Hude does not.

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sonese. Before them Miltiades fled and was absent from Chersonese¹ until such time as the Scythians were expelled and the Dolonci brought him back. This (restoration) occurred in the third year before the situation then obtaining over him; then he learnt of the Phoenician approach . . . and sailed to Athens.² In this narrative the phrases 'the situation (later) obtaining' (*τῶν κατεχόντων πρηγμάτων* in 40. 1) and 'the situation then obtaining over him' (*τῶν τότε μὲν κατεχόντων* in 40. 2 fin.) refer to the same situation; and this situation is dated by the three uses of *τότε* in 34. 1 and in 40. 2 fin. to the approach of the Phoenicians in 494/3. His restoration by the Dolonci was then in the third year before this situation, that is in 496/5 on inclusive reckoning, and his years of absence from the Chersonese fell before 496/5. 'The worse situation' in 40. 1 is not explained by Herodotus, but it probably refers to the activities of Megabazus in 513 onwards which doubtless affected the Chersonese seriously.³ In that case Miltiades III was driven out by the Scythians in 511/10, and he was presumably in Athens from c. 510 until c. 496. During part of these years he was probably leader of the nobles (*Arist. Ath.* 28. 2 *προειστέλλει . . . τῶν γνωρίμων Μιλτιάδης*), and he may have made the reputation which prompted the Athenians to elect him general in 490/89. By then it was evidently known that Hippias had instigated the murder of Miltiades' father Cimon, and this knowledge may have caused the Athenians to trust Miltiades, despite the fact that his son Metiochus was being treated well by the Persian court.

The birth of Miltiades III may be placed approximately about 549. He was then approximately 25 years old as archon in 524/3; 27 and 33 when he contracted his two marriages; 39 on his expulsion; 53 on his restoration, 56 on his second expulsion, and 59 on his election as general. He and his son Cimon both won victories at Olympia.⁴ The age for the last appointment is acceptable, if we compare the election of Pericles in 431/0 at another great crisis in Athenian history. The age for the election to the archonship in 524/3 is interesting. In the late fifth century a man had to be 30 years old to be eligible for candidature. Whatever the law was in the sixth century,⁵ the practice depended on the interests of the Peisistratidae. They may have intended already to do away with Cimon,⁶ and there could be no better cover for their plan than the appointment of his young son Miltiades to the archonship of 524/3.

¹ Hude wrongly brackets thus: *ἔφυγε [Χερσόνησον]*. The imperfect means that he was continuously in exile and the place, from which he was in exile, is in the accusative; cf. Thuc. 5. 26. 5 *ἐνέβη μοι φεύγειν τὴν ἑμᾶντρον*. Of the codices PDRSV read *Χερσόνησον* and AB read *ἀπὸ Χερσόνησου*, which Legrand prefers; C omits the word.

² The text is bracketed or emended by Dobree, Powell (*C.Q.* xxix. 159), and Wadegery (see *J.H.S.* lxi. 216), but there is nothing in the manuscript tradition to suggest corruption.

³ A considerable number of cities in the area of the Hellespont and Bosphorus were burnt, and Megabazus' forces probably used the Chersonese as a base; cf. Hdt. 4. 143-4; 5. 1; Ctesias 17; Polyaeus. 7. 11. 5.

⁴ Ps.-Andocides 4. 33. Paus. 6. 10. 8 says he will recur to a dedication by 'Miltiades the Athenian', that is Miltiades III, at

Olympia in connexion with statues of horses and chariots, but he does not do so. G. H. Förster, op. cit., p. 9, who does not refer to Paus. 6. 10. 8, thinks that [Andocides] confused the victories of father and son, Miltiades and Cimon, with the three victories of Cimon, son of Stesagoras; but Andocides pins the ostracism and the charge of relations with his sister to the correct Cimon. It is certainly not to be supposed that Andocides meant to refer all the points to Cimon, son of Stesagoras.

⁵ It is probable that in the fifth-century an age-limit was introduced to exclude influential young aristocrats.

⁶ Beloch, *G.G.* ii. 2. 136, and others condemn Herodotus and acquit the Peisistratidae. But Herodotus was in a better position than Beloch to know the facts and form a judgement.

3. THE STEMMA OF THE PHILAIDS

In order to put the conclusions reached so far in a summary form, a stemma of the family is appended (see p. 121).

In this stemma I have assumed that Tisander (Hdt. 6. 127 b) and not Miltiades (Marcellin. *V.Th.* 3) was the father of Cypselus renamed Hippocleides, and that Miltiades was the grandfather of Cypselus.¹ The grandfather Miltiades was probably archon at Athens in 664/3 and again in 659/8 (Paus. 4. 23. 10 and 8. 39. 3).² His son Cypselus was perhaps a grandson on his mother's side of the Corinthian tyrant Cypselus, who ruled c. 657–627, and a nephew of Periander who ruled c. 627–587. The birth c. 615 of Cypselus renamed Hippocleides is then compatible with this position in the Cypselid stemma and also with his wooing of Agariste in 575. The fact that Cypselus renamed Hippocleides was (or had been) a married man was no bar to entry for Agariste's hand (Cypselus senior himself practised polygamy as Periander did later); but the fact, that he was a married man (or widower) of mature years, made his dancing even more disreputable in the eyes of Cleisthenes.³ In the Philaid family the men married rather younger than in the Alcmeonid family, since the gap of six generations from Miltiades to Cimon is approximately 160 years.⁴

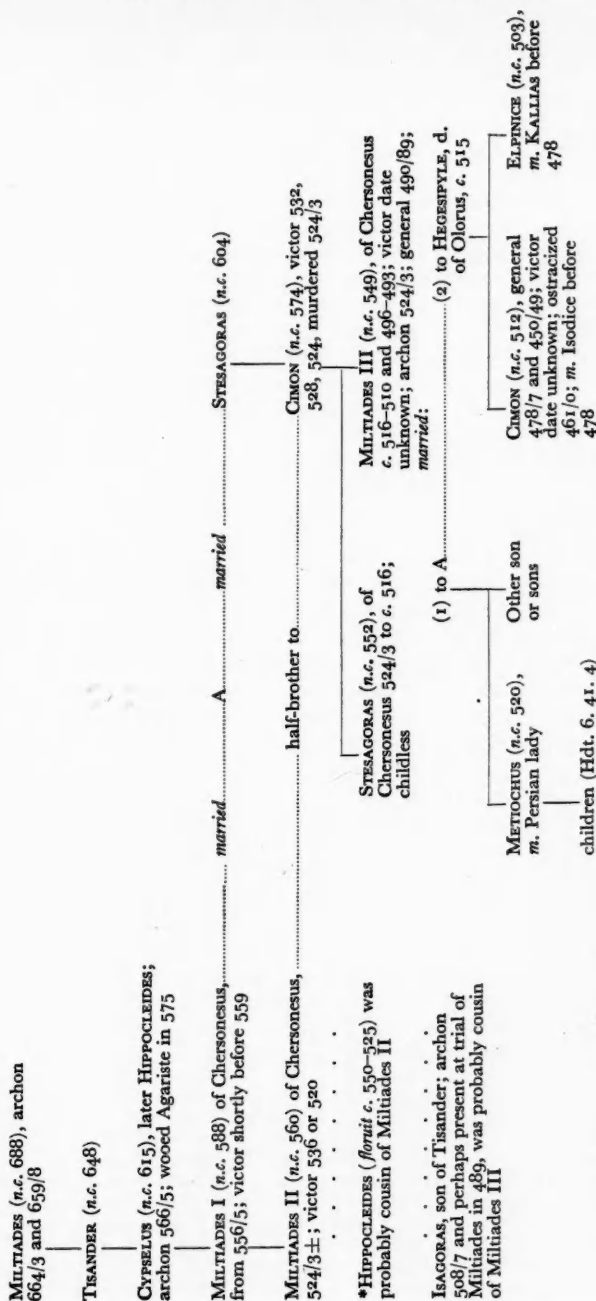
¹ The passage in Marcellin. *V.Th.* 3 is corrupt; Vömel, *Exerc. chronol. de aet. Sol. et Croesi*, 16, suggested inserting Tisander between Miltiades and Hippocleides, as I have done.

² Cadoux, *J.H.S.* lx. 90 notes 82–86 and 115 n. 249, discusses this phenomenon with reference to other writers. It is probable that the ban on tenure of a second archonship was introduced together with the age-limit and for the same purpose. Cadoux is correct in saying 'nor, again, do we know if this man or men belonged to the Philaid family'. For, in the absence of evidence either way, we cannot be certain that the Miltiades of 664/3 is the same person as the Miltiades of 659/8 or that both belonged to the Philaid house. But the odds are so high in favour of one of them being a member of that leading family (see p. 113, n. 1) that he should be accommodated in any stemma given for that family. Personally I think the odds are high in favour of the same Philaid Miltiades having been elected twice. In 575 the Philaidae were the richest family in Athens; they were perhaps surpassed later by the Alcmeonidae, when Alcmeon got money from Croesus (Hdt. 6. 127. 4; 125. 2).

³ Of the few families we have mentioned, Cypselus and Periander of Corinth practised polygamy (for Periander see Hdt. 3. 50–53 where the point is that Periander had only two sons by Melissa, his other sons being by other wives or another wife—a point which Beloch, *G.G.* i. 2. 283, seems to miss); Peisistratus of Athens, Miltiades III, and his son Cimon may well have done likewise. So too

women of noble houses re-married; besides the anonymous wife of Cypselus and Stesagoras in the Philaid family, we have the example of Timonassa, who was married to Archinus of Ambracia and then to Peisistratus. If a noble was already married when he took a second wife, it was not necessarily an insult to the family of the first wife or to that of the second wife. Melissa was killed when her sons were 18 and 17 years old; yet Periander had other sons of similar age, who were therefore born of other wives or another wife during Melissa's lifetime (*F.Gr.H.* 90 F 59), and the tension between Periander and Procles only came to a head after the death of Melissa. So, too, when Miltiades, already the father of sons by an Athenian wife, married the daughter of the Thracian king Olorus, it was no insult to Olorus whether his Athenian wife was alive or deceased. In the present case there is no reason to suppose that Hippocleides' fatherhood was any bar to his wooing of Agariste, or even to suppose that he was a widower (*C.A.H.* iii. 765). The aristocrats of the seventh and sixth centuries were a law unto themselves; the closest parallel is the aristocracy of Macedonia.

⁴ It is a mistake to suppose that all families in all states or in any one state observed a minimum age of marriage, especially if it is put at 30 years on the basis of Solon fr. 27. 9 who says 28–35 is a good age for marriage (e.g. *C.A.H.* iii. 765). All we can say is that in general Solon, Plato, and others advised a man to marry between 28 and 40; the practice we can learn better from the stemmata. For the Alcmeonids see *C.Q.* vi. 47.



* If the restoration *Ἰπποκλέης καλός* is made on a vase of the period (Rumpf, *Sakontides*, p. 20), to which the late Mr. T. J. Dunbabin drew my attention. The restoration Hippokl[es kalos] is more usual.

4. THE CHERSONESE AND LEMNOS IN CORNELIUS NEPOS, *Miltiades*

Before considering the narrative of Cornelius Nepos, *Miltiades*, we may summarize the position held by the rulers of the Chersonese. Miltiades I was invited by the Dolonci, in consequence of an oracle from Delphi, to come to the Chersonese. He consulted the oracle, sailed taking some Athenian volunteers with the envoys of the Dolonci, and won the Chersonese, whereupon the Dolonci who had invited him made him 'tyrant'. It was this same position of 'tyrant' to which Miltiades III was invited in 496 by the Dolonci, and which he held till 493 (Hdt. 6. 34. $\epsilon\tau\upsilon\rho\acute{\alpha}\nu\eta\nu\epsilon \dots \tau\eta\nu \acute{\alpha}\rho\chi\eta\nu \tau\alpha\upsilon\tau\eta\nu \dots \tau\rho\acute{\omicron}\pi\omega \tau\acute{\omega}\delta\epsilon$, 6. 36. $1 \kappa\alpha\iota \mu\upsilon\nu \omicron\iota \acute{\epsilon}\pi\alpha\gamma\alpha\gamma\acute{\omicron}\mu\epsilon\nu\omicron\iota \tau\upsilon\rho\alpha\nu\nu\omicron\nu \kappa\alpha\tau\epsilon\sigma\tau\acute{\eta}\sigma\alpha\nu\tau\omicron$, where the story is concluded, and 6. 40. $2 \kappa\alpha\iota \mu\upsilon\nu \omicron\iota \Delta\acute{o}\lambda\omicron\gamma\omicron\kappa\omicron\iota \kappa\alpha\tau\acute{\eta}\gamma\alpha\gamma\omicron\nu \acute{\omicron}\pi\acute{\iota}\sigma\omega$). While holding the position of native ruler among the Dolonci, that is of 'tyrant' by Greek standards, Miltiades I built a wall from Cardia to Pactye; and he was accredited with the second foundation of Cardia and with the foundation of Pactye and Crithote.¹ In some sense Miltiades I founded a state in the Chersonese. But Miltiades II was the popular ruler, to whom 'the Chersonesitae' sacrificed after his death (Hdt. 6. 38. 2). In turn Stesagoras succeeded to the position of ruler. But Miltiades III, when he was sent out with an Athenian force by the Peisistratids, achieved a *coup d'état* and seized the Chersonese with the use of a mercenary force (Hdt. 6. 39). Thus the régime of c. 516-511, during which he attacked Lemnos as we shall see, was radically different from the régimes of his predecessors and his later régime in 496-493.

In *Miltiades* 1-3, Cornelius Nepos records that a large number of Athenians, wishing to join in the project of the Athenian state to plant a colony in the Chersonese, asked Delphi to choose a leader for them. Miltiades, Cimon's son, that is Miltiades III, was chosen.² Miltiades *cum delecta manu classe Chersonesum profectus* approached Lemnos but was not strong enough to seize it. Going on to the Chersonese, *brevi tempore barbarum copiis disiectis, tota regione quam petierat potitus, loca castellis idonea communiit*. He gave lands to the Athenians, and he arranged also for the continued residence of the natives who regarded him as of royal dignity (*erat inter eos dignitate regia, quamvis carebat nomine*). He then won Lemnos from the Carians (*Cares qui tum Lemnum incolebant*); they were fooled by him in regard to a remark of theirs about the north wind (1. 5 and 2. 4), but they did not dare to resist. They then left the island. Miltiades went on to win the rest of the Cyclades for Athens. *Eisdem temporibus Persarum rex Darius ex Asia in Europam exercitu traiecit Scythis bellum inferre decrevit*. Nepos then describes the incident at the bridge over the Danube, in which Miltiades urged the Greeks to destroy the bridge. One detail in this narrative is anachronistic. Nepos writes in terms of fifth-century Athens when he says that all the Cyclades fell under her rule.³ But this detail does not invalidate the substance of the story, the sequence of events and the chronology.

¹ Cardia = Scymn. 699; Strabo fr. 52 (citing Hdt.); Schol. in Dem. 63. 16. Pactye = Scymn. 711. Crithote = *ibid.*; Ephorus in *F.Gr.H.* 70 F 40. U. Kahrstedt, 'Beiträge zur Geschichte der Thrakischen Chersones' (in *Deutsche Beiträge zur Altertumswissenschaft*, vol. 6 (1954), p. 6) regards Miltiades I as a ruler of the Dolonci, a 'Stammeshaupt'.

² Frazer commenting on Paus. 6. 19. 6 says that Nepos made a mistake; Frazer thinks Nepos should have said 'Miltiades, son of Cypselus'. This is quite arbitrary; for the story in Nepos is entirely different from that in Hdt. 6. 34-36 both in detail and in chronology.

³ Nepos may have misunderstood the allusion in Hdt. 7. 6. 3 to the islets adjacent to Lemnos; see Berve, *op. cit.* pp. 22-23.

Let us turn to the account in Herodotus. The Peisistratidae sent Miltiades out to take control of the situation in the Chersonese on the death of Stesagoras; they sent him with a trireme (6. 39). If Miltiades III was simply going out to succeed his brother peaceably, there was no need for the Peisistratidae to send him on one of their best warships¹ or to give official support to the expedition. On his arrival Miltiades did not behave like a peaceful heir. He exploited the polite sympathy of the local chiefs by an act of treachery; he put them in chains, seized the Chersonese, maintaining a force of 500 mercenaries in his pay, and married Hegesipyle. Herodotus, as so often in his digressions, has compressed much in little. He wished to tell us about Miltiades and about the situation which the Phoenicians found on their arrival at the Chersonese. It is, then, natural for him to omit much. Nepos fills in the background and thereby explains some peculiar features of the story in Herodotus. When Miltiades III went to the Chersonese c. 516, he sailed on a trireme *cum delecta manu classe*² with the state-support of the Peisistratidae, in order to stage a *coup d'état* and plant Athenian colonists. By an act of treachery and by adroit use of mercenaries he got the Chersonese into his grip and married Hegesipyle, whose royal rank may have helped Miltiades to win regard *dignitate regia quamvis carebat nomine*. The Athenians he provided with lands and enriched by frequent raids.³ The Athenians of the Chersonese themselves dedicated at Olympia an ivory horn of Amalthea with an inscription in 'ancient Attic letters': 'The men from Chersonesus dedicated me as a delight to Olympian Zeus after taking Teichos Aratou; and their commander was Miltiades.' Thus, whereas Miltiades I had been invited to rule and Miltiades II had been honoured after death by the Chersonesitae, 'Miltiades, son of Cimon, was the first of his house who seized the sovereignty of the Thracian Chersonese' (Paus. 6. 19. 6 ἀνάθημα Μιλτιάδου τοῦ Κίμωνος, δὲ τὴν ἀρχὴν ἔσχεν ἐν Χερρονήσῳ τῇ Θρακίᾳ πρῶτος τῆς οἰκίας ταύτης).⁴

The history of Lemnos is narrated briefly by Herodotus. He is particularly

¹ Herodotus is careful to distinguish types of warship from one another. At this stage most of the Athenian fleet consisted of penteconters (Thuc. I. 14. 3).

² Herodotus mentions the trireme in which Miltiades sailed; part of the 'picked band' may have sailed on other ships, and the Athenian settlers probably came later.

³ *F.Gr.H.* 70 F 40 (Ephorus) and Suidas, Κριθωτὴ πόλις τῶν ἐν Χερρονήσῳ, κατοικηθεῖσα ὑπὸ Ἀθηναίων τῶν μετὰ Μιλτιάδου παραγενομένων and Scymn. 711 (adding Pactye) may refer to this period of settlement. Miltiades I took only some Athenian volunteers in 556; and Miltiades III in 496-493 would have had difficulty in persuading many Athenians to settle in the Chersonese during the Ionian revolt. The settlement at Crithote is, then, an example of Nepos' phrase 'multitudinem, quam secum duxerat, in agris collocavit' (Miltiades 2. 1).

⁴ On this passage the usual comment (Schubart, Hitzig-Blümner, Frazer, Berve, etc.) is *erravit Pausanias*; 'Miltiades son of Cypselus was the first Athenian tyrant of the

Chersonese'. But let us see what Pausanias says. In the Teubner ed. Spiro bracketed τὴν in order to read ἀρχὴν ἔσχε so that the meaning would become 'held office'. However, the manuscripts all read τὴν ἀρχὴν. Further, Pausanias does not use the imperfect tense εἶχεν but the aorist ἔσχεν, just as Hdt. 6. 39. 2 used the vivid present Μιλτιάδης τε δὴ ἔσχε τὴν Χερσονήσον (cf. ἔσχε τὴν ἀρχὴν in Th. 6. 54. 2). Pausanias' point is that Miltiades son of Cimon first seized power in the Chersonese. The dedication in Attic script was not made by native Chersonesians, as Frazer seems to suppose, but by Athenians operating from the town Chersonesus; why should the native Chersonesians capture their own district or fort, whichever Aratou Teichos was? The inscription in 'ancient Attic letters' may have resembled the Phanodicus inscription (Syll. 1³. 2). For commentary see P. Friedländer, *Epigrammata* (1948), nr. 52, who notes that the style suits a date late in the sixth century. For the most recent discussion of the city Cherronesus and its coins see U. Kahrstedt, *op. cit.*, pp. 8-9.

interested in the fact that from early times Pelasgians occupied Lemnos, having seized Athenian women (4. 145). The Pelasgians were still in the island *ἐν τότε* at the time of Otanes' operations (5. 26), and in describing those operations Herodotus devotes a chapter (5. 27) to the ultimate fate of these Pelasgians of Lemnos. As the meaning of the chapter is disputed, I must discuss it at some length.

After mentioning the appointment of Otanes (5. 25) and digressing about Otanes' antecedents, Herodotus returns to his appointment to the command (5. 26). Otanes took Byzantium, Calchedon, Antandrus, Lamponium, Lemnos, and Imbros, the two last being *ἐν τότε* occupied by Pelasgians. Herodotus then digresses (5. 27) to give the further history of the Lemnian Pelasgians. 'After a good fight and a long defence the Lemnians were worsted; the survivors of them were placed by the Persians under a governor Lycaretus, brother of Maeandrius, formerly tyrant of Samos. This Lycaretus during his governorship in Lemnos *τελευτᾷ*. *αἰτὶν δὲ τούτου ἦδε*. He kept selling them into slavery and destroying¹ them one and all, on the charge that some were deserters from the campaign against Scythia and that others harassed the army of Darius during its return from Scythia.' Herodotus then reverts to Otanes (5. 28): 'So great then were the exploits of this man in his command, and there was a respite from trouble until new troubles began in Ionia.'

The usual translation of the words I have left in Greek is as follows. 'This Lycaretus died afterwards in his government in Lemnos. The cause which Otanes alleged for conquering and enslaving all these nations was . . .'² The weakness of this translation is that the death of Lycaretus is irrelevant, the transition to Otanes is abrupt, and the sense is absurd; for no one can believe that Otanes kept enslaving and conquering (or destroying) all the people of Byzantium, Calchedon, Antandrus, Lamponium, Lemnos, and Imbros, whom he had already captured (*εἰλε* four times in 5. 26).³ In the Oxford text and the Budé text a lacuna is printed after *τελευτᾷ*, but this does not overcome the first and third points of weakness in the usual translation.

The best clue to the sense lies in Herodotus' method of exposition. Habitually he mentions a point, digresses to elaborate an aspect of it and resumes the point again; the first mention and the resumption are usually marked by some verbal echo. Thus at 5. 25 he mentions the appointment of Otanes to command

¹ Both verbs are in the imperfect tense. For *καταστρέφειν* with a personal object see Hdt. 1. 71 fin., 1. 130 fin. et alibi, where the meaning varies from conquering to destroying. The meaning here is 'destroying', because conquest in the aorist tense (*εἰλε* four times) has already been mentioned in the preceding chapter and because here we require the stronger meaning in the phrase *ἡνδραποδίζετο καὶ καταστρέφετο*.

² Rawlinson reverses the order of enslaving and conquering, i.e. as I take it 'destroying'. Legrand in the Budé edition has 'ce Lycarétos mourut à Lemnos dans l'exercice de son commandement . . . voici ce qui motivait ses actes: il réduisit . . .' (with a note 'il = Otanès'). Godley in the Loeb edition translates 'this Lycaretus came to his end while ruling in Lemnos; this was be-

cause he strove to enslave and subdue all the people, accusing some . . .' The difficulty here is that Godley requires a pun on *αἰτὶν* and *αἰτιώμενος*, which in Herodotus' idiom of writing must have the same meaning; that it is an unintelligible reason for Lycaretus' death with Persia's might and methods behind him; and that 'all the people', whoever they are, have been subdued by Otanes in the previous chapter.

³ Nor does it make sense historically; for some of these states had already been punished by Darius and Megabazus for their part in the Scythian campaign and its aftermath (Hdt. 4. 144; 5. 1; Polyaeus. 7. 11. 5; Ctesias 17), Calchedon in particular having been sieged and burnt by Darius on his return.

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'Οτάνεα δὲ ἀποδέξας στρατηγόν; he then digresses to explain his antecedents; he resumes Otanes at 5. 26 οὗτος ὢν ὁ 'Οτάνης, ὁ ἐγκατιζόμενος ἐς τοῦτον τὸν θρόνον, τότε διάδοχος γενόμενος Μεγαβάζω τῆς στρατηγείης. Next he mentions Otanes' exploits, ending with the Pelasgians of Lemnos and Imbros; he then digresses to explain the fate of these Pelasgians οἱ μὲν δὴ Λήμνιοι κτλ.; this brings him to mention Lycaretus whose antecedents he gives in a few words; he then resumes Lycaretus οὗτος ὁ Λυκάρητος, then the fate of the Pelasgians πάντας ἡνδραποδίζετο καὶ κατεστρέφετο, then the exploits of Otanes οὗτος μὲν νυν τοσαῦτα ἐξεργάσατο στρατηγήσας. It should be noted that in each resumption οὗτος stands first in its sentence, usually with a resumptive particle. Therefore we cannot assert that τοῦτον in the phrase αἰτίη δὲ τοῦτον ἤδε resumes Otanes, and in any event Otanes is resumed at 5. 28 οὗτος μὲν νυν τοσαῦτα ἐξεργάσατο στρατηγήσας.¹ Consequently τοῦτον refers either to the preceding situation or to Lycaretus; the former is less likely because Herodotus, like most Greek authors, uses ταῦτα, not τοῦτο to resume a situation,² and I therefore take τοῦτον to be Lycaretus. The word-order gives us a further clue: αἰτίη is emphatic and is resumed by αἰτιώμενος, the verbal echo showing that αἰτίη δὲ τοῦτον ἤδε means 'the charge made by Lycaretus was this', and the word πάντας is emphatic and means that 'all' the persons concerned, i.e. the Pelasgians of Lemnos, were exterminated from Lemnos. We now see why at 5. 26 fin. Herodotus used the words ἐτι τότε (εἰλε Λημόν τε καὶ Ἰμβρον, ἀμφοτέρως ἐτι τότε ὑπὸ Πελασγῶν οἰκομένης); for the following chapter saw the end of these Pelasgians. A lacuna may still have to be postulated,³ but it will be a short one which does not disrupt Herodotus' exposition.⁴

This Lycaretus who disposed of all the Pelasgians in Lemnos figured earlier in Herodotus' history at 3. 143, when he distinguished himself at Samos by executing in cold blood the chief men of Samos who had been seized by his brother Maeandrius. As regards the date of his activities, the reduction of Lemnos by Otanes may be placed between the end of Megabazus' command and the lull preceding the Ionian revolt, perhaps as early as 509, if Otanes was punishing states which had joined the Scythians in their raid. Lycaretus would have done his work before 500, with the aid of a Persian garrison and probably of Samian refugees.⁵

¹ In this sentence the following words stress the resumption after a digression: οὗτος, νυν, τοσαῦτα, and στρατηγήσας.

² Of innumerable examples it may suffice to quote Hdt. 6. 40 fin. where ταῦτα μὲν δὴ refers to Miltiades' restoration.

³ The meaning in the lacuna may be 'during his rule in Lemnos Lycaretus puts an end to the Pelasgians'. This would justify the vivid present τελευτᾷ and lead up to what follows. One or two words only may have dropped out (e.g. τελευτᾷ αὐτοὺς if such a usage is possible, which I doubt, meaning 'puts an end to them', or else τελευτᾷ αὐτοὺς διαφθεύρων meaning 'ends by destroying them').

⁴ Herodotus' method of exposition resembles that of Thucydides to which I drew attention in *C.Q.* ns ii (1952), 127 f. One of many examples on a larger scale may be

noted in 6. 33 to 6. 41, where the arrangement of the narrative is as follows. The Phoenicians conquered with the exception of Cardia all the cities of the Chersonese (6. 33. 3). Their ruler was Miltiades son of Cimon, the position of ruler having been won earlier by Miltiades son of Cypselus (6. 34. 1). The activities of Miltiades son of Cypselus are then narrated (6. 34. 2 to 6. 38. 1 init. οὗτος μὲν δὴ); next the narrative is brought down to the first establishment of Miltiades son of Cimon in the Chersonese (6. 38. 1 to 6. 40. 1 οὗτος δὴ ὁ Κίμωνος Μιλτιάδης); next comes the narrative which brings the Phoenicians towards the Chersonese and the flight of Miltiades from Cardia (6. 40. 1 to 6. 41. 1). The order of topics is ABCCBA.

⁵ The Samians who escaped the massacre under Syloson probably joined Lycaretus the Samian in Lemnos.

In 6. 136. 2 Herodotus, describing the trial of Miltiades on his return from Paros in 489, says that his friends made much mention of the battle of Marathon and the capture of Lemnos, saying 'that he captured Lemnos, exacted vengeance from the Lemnians, and handed it over to Athens'. In 6. 137-40 he tells the story from the beginning, for which he cites Hecataeus. The beginning resumes the mention in 4. 145, and proceeds to narrate an ancient order by the Delphic oracle, that the Pelasgians of Lemnos must give any compensation Athens demanded, and the Pelasgian retort to the Athenians 'we shall give you the island when a ship travels from your land to our land in a single day with a north wind'. Then many years later, when the Chersonese had passed under Athens' control, Miltiades son of Cimon sailed with the prevailing etesian winds from Elaeus in Chersonese to Lemnos and asked the Lemnians to leave the island. The people of Hephaestia agreed, but those of Myrina, not acknowledging the Chersonese to be part of Attica, refused and were besieged, until they came to terms. Thus did Athens and Miltiades get hold of Lemnos.¹ Its capture by Miltiades is not dated by Herodotus, but it must precede the extermination of the Pelasgians by Lycaretus (Hdt. 5. 27. 2). The capture, then, must fall in Miltiades' first tenure of power in the Chersonese.

The sequence of events may be summarized as follows: c. 516 Miltiades with an Athenian force seized the Chersonese; later he won over Lemnos, which he gave to Athens; c. 511/10 Miltiades fled the Chersonese entirely; perhaps c. 509 Otanes captured Lemnos and Imbros; thereafter Lycaretus wiped out the Pelasgian inhabitants of Lemnos, such as survived from the Athenian occupation and the Persian attack.

Turning now to the account in Nepos we find that he puts Miltiades' seizure of Lemnos shortly before Darius, having crossed into Europe in 514/13, decided to attack Scythia. Zenobius 3. 85 also dates it to the period when Darius was busy in Thrace and attributes the withdrawal by Hermon, tyrant of Hephaestia, to his fear of the force of Darius. Diodorus Siculus 10. 19—a series of excerpts, not a continuous narrative—describes Darius' ambition to subjugate Europe and so rival his ancestors (a passage worthy of a Diodorus proem); next comes the surrender by Hermon and his 'Turrenoi' through 'fear of the Persians'. These three accounts implement each other. Lemnos, then, fell to Miltiades in 514, when the plans of Darius and the movement of troops gave some of the Pelasgians cause to withdraw, as the Phocaeans and the Teians had done at the approach of Harpagus.²

The source of Nepos is not Herodotus. For, although Nepos has a few points in common with Herodotus, his narrative is much fuller and gives a different setting to the remark about 'reaching Lemnos from home when the wind is in the north'. His source, in fact, did not give the Athenian tradition that the oracle of Delphi lay behind the remark and justified Athens in her action (cf. Hdt. 6. 139 and Nepos 1. 5 and 2. 4). Nepos also says that the Carians of Lemnos did not dare to resist and migrated from the island; that Miltiades reduced the rest of the Cyclades to Athenian rule; and that at the same time Darius decided to attack Scythia. The ultimate source is probably Hellenicus

¹ Meyer, *Forschungen* (1892), i. 14, holds that the Athenians expelled all the natives and installed a cleruchy. Hdt. does not say so; in any case cleruchs used natives to till the land in most cases. Bérard, *Revue des*

études anciennes, li (1949), 228, also holds that Miltiades expelled all the Pelasgians.

² Berve, *op. cit.*, p. 50, dating Lemnos' fall between 510 and 505, does not mention Nepos, *Miltiades*, 1-3.

of Lesbos, who had a particular interest in and sympathy for the Pelasgians, and who wrote in a period overshadowed by Athenian imperialism.¹

5. THE TWO TRIALS OF MILTIADES

The first trial of Miltiades occurred in 493 on his return from the Chersonese, and the charge was that he had been guilty of tyranny in the Chersonese (Hdt. 6. 104. 2 τυραννίδος τῆς ἐν Χερσονήσῳ). His prosecutors, being Athenians, referred not to his rule in c. 516–511 when he favoured the Athenian settlers, but to his rule in 496–493 when he came at the invitation of the Dolonci and was tyrant over the Greek cities, which were in many cases occupied by Athenians (Hdt. 6. 34. 1 ἐτυράννευε δὲ αὐτέων μέχρι τότε Μιλτιάδης). On this charge he was acquitted.

Nepos, *Miltiades* 7. 5, describes the second trial of Miltiades in 489. His description includes the sentence: *itaque quoniam ipse pro se dicere non posset, verba fecit frater eius . . . agoras*. The apparatus criticus in the Oxford text by E. O. Winstedt reads: Stesagoras Longolius: Sagoras Dan. ABPR (the best codices here included): isagoras dett: Diagoras u. (= important ed. 1542). In the text Winstedt, following Longolius, who is a commentator, reads 'Stesagoras'. Miltiades' only full 'brother' Stesagoras died childless c. 516 (Hdt. 6. 38. 2); if there was a Stesagoras son of Miltiades, he would have carried little weight at his father's trial—apart from the Latin being *frater* and not *filius*. There is, then, no reason to associate the name Stesagoras with the text here. In any case the missing letters should be two before 'agoras' and not four. Five codices give 'sagoras' and one gives 'diagoras', so that the reading 'isagoras' is a strong candidate.² If so, Isagoras is a name in the Philaid family and an important man, Isagoras, was related to Miltiades.

The leader of the aristocrats in the faction after the fall of the tyranny at Athens was, says Herodotus (5. 66), 'Isagoras, son of Tisander, a man of a distinguished family, but I cannot relate his antecedents (τὰ ἀνέκαθεν); his kindred sacrifice to Zeus Carius'. A Tisander was a forefather of the Philaid clan. It is likely that a distinguished man of a distinguished family with that distinguished name belonged to the Philaid house. Tisander could fit in as a son of Cypselus and a brother of Miltiades I, and take his name from his grandfather Tisander; his son Isagoras, as a contemporary of Miltiades II, who was born about 560, would be in his prime c. 508/7, when he became archon; and he could well be alive in 489. There are many other possibilities—descent from Cypselus' sister or brother, Miltiades I's sister or brother, and even at a pinch Miltiades II's sister or brother. In any case the word 'frater', translating the Greek ἀδελφός, was used to include such kindred as father's brother's son and sister's husband. Thus it is not unlikely that Isagoras, son of Tisander, was a Philaid. To this view Aristotle, *Ath. Pol.* 20. 1 'Ἰσαγόρας ὁ Τεισάνδρου φίλος ὢν τῶν

¹ Herodotus cited Hecataeus and set against his account that of the Athenians in 6. 137. He then ceased to cite Hecataeus and the account in 138–140 seems to be a purely Athenian one. In theory Nepos might have drawn on Hecataeus; but in fact Hecataeus probably did not include historical narrative of this type. For Hellanicus' interest as a Lesbian in Pelasgians cf. L. Pearson, *Early Ionian Historians*, pp. 157 f. on the Phoronis;

for this narrative Nepos would have drawn on Hellanicus' *Atthis*, and, if it is so, then this is the only passage concerning late sixth-century history which may have been derived from Hellanicus.

² It is interesting that a similar difficulty arises in *Marmor Parium* 46 σαγορον, for which *Λυσσαγόρου* and *Ἰσαγόρου* have been suggested.

τυράνων καὶ Κλεισθένης τοῦ γένους ὧν τῶν Ἀλκμεωνιδῶν gives support. The clan connexions are being described. Isagoras is 'related to' the Peisistratids, and the Philaid house we know to have been related to the Peisistratids.¹ The only difficulty is that Herodotus cannot give the antecedents of Isagoras. Yet Herodotus gives the descent of Miltiades, son of Cypselus, from Aeacus and Aegine quite happily (6. 35). However, he uses the term ἀνέκαθεν also for immediate antecedents in the case of Hippocleides' kinship to the Cypselids at Corinth (6. 128. 2). Perhaps here Herodotus could not give Isagoras' father's immediate antecedents. This remains a puzzle, to which there is no ready answer, but our inability to answer it should not cause us to dismiss Isagoras, son of Tisander, from the Philaid clan.²

6. THE ARCHAEOLOGICAL EVIDENCE

The results of the Italian excavations in Lemnos have been interpreted by Mustilli as follows.³ The native 'Pelasgian' culture persisted until the end of the sixth century and the life of the sanctuary ended 'in the second half of the sixth century'. The imported pottery was at first Protocorinthian and Corinthian, extending perhaps into the sixth century. Later there appeared Attic black-figured lekythoi and some Attic red-figured vases. On his interpretation of the literary evidence Mustilli maintains that Miltiades conquered Lemnos between 499 and 493. He supports his view by arguing that, although these lekythoi may have been produced in the sixth century, the shape of the almost horizontal shoulders of the lekythoi (*con spalla quasi perfettamente orizzontale*) suggests that they belong to the first decades of the fifth century.

The weakness of Mustilli's interpretation is that the pottery cannot be dated firmly to this or that decade. The chronology of the local native pottery does not rest on internal evidence, and late Corinthian pottery may overlap with the earliest lekythoi. Miss Haspels, for instance, holds that from 540/530 onwards the shoulders of the Attic black-figured lekythoi are 'more nearly horizontal' and that shortly after the introduction of the red-figure style the body of the lekythos is 'a tall narrow cylinder'.⁴ Nor is it easy to account for a hiatus in the importation of Greek pottery between the early sixth century and the early fifth century; for at that time Greek trade was flourishing in the north-east Aegean. It is perhaps more probable that the Corinthian imports extended into the early decades after 550 B.C. and that they were succeeded by Attic imports soon after 530 B.C. In other words, the archaeological evidence remains inconclusive.⁵ It may be compatible with a conquest of Lemnos by Miltiades in 515/14.

The names Μιλτιάδης καλός and Στεσαγόρα καλός occur on sherds of Attic

¹ That the word φίλος in *Ath. Pol.* 20. 1 means 'akin' is confirmed by its use in 18. 4 φίλοι τοῖς τυράννοις and 18. 5 φίλους τ'αυτῶν, because there the point is that the tyrants will commit δόσβεια by killing their own kindred, and by its use in 22. 4 where τοὺς τῶν τυράνων φίλους refers to Hipparchus being a member τῶν ἐκείνου (Πεισιστράτου) συγγενῶν; cf. 22. 6. The kinship of the Peisistratidae, who came from the deme Philaidae, with the Philaid house is stated in Marcellin. *V.Th.* 18.

² Kirchner, *Prosopogr. Attica*, s.v., does so

tacitly.

³ D. Mustilli, 'L'occupazione ateniese di Lemnos e gli scavi di Hephaistia' in *Studi... offerti a E. Ciaceri* (1940), p. 149, and especially, pp. 156-8. I was able to see this rare book through the courtesy of Bodley's Librarian.

⁴ C. H. E. Haspels, *Attic B-F Lekythoi* (1936), pp. 33 and 41.

⁵ This is also true of Wade-Gery's attractive comparison of the Acropolis mounted archer with the archer on the Ashmolean plate, *J.H.S.* lxxi (1951), 220.

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red-figured ware.¹ The former is dated stylistically to 520-510 and portrays a mounted archer, probably a Scythian. One imagines that these words were fired in the making of the vase by order of the man himself or his family; perhaps in this case Miltiades was putting out propaganda for his venture to the Chersonese c. 516. The latter is dated stylistically to the years c. 500-490; it could give the name of a son or nephew of Miltiades, and such a Stesagoras was presumably in Athens c. 510-496 and later.

7. SUMMARY OF CHRONOLOGICAL CONCLUSIONS

The conclusions, to which the consideration of the evidence has brought us, may be summarized as follows:

- c. 560 Miltiades I victor at Olympia.
- 556/5 Miltiades I proceeded to the Chersonese.
- 536 (or 520) Miltiades II victor at Olympia.
- 532 Cimon victor at Olympia.
- 528 Peisistratus proclaimed victor at Olympia.
- 524 Miltiades II still ruler of the Chersonese.
- " Stesagoras resident in the Chersonese.
- " Cimon victor at Olympia.
- " Murder of Cimon.
- " Miltiades III, archon 524/3, buried Cimon's mares.
- c. 522 Marriage of Miltiades III to an Athenian woman.
- c. 516 Murder of Stesagoras, ruler of the Chersonese.
- " Miltiades III seized power in the Chersonese.
- c. 515 Athenians 'from Cheronesus' made a dedication at Olympia.
- " Miltiades III married Hegesipyle.
- 515/14 " " captured Lemnos.
- 514/13 " " served on the Scythian expedition of Darius.
- c. 511 " " left the Chersonese.
- c. 509 Otanes captured Lemnos and Imbros.
- c. 509-500 Lycaretus annihilated the Pelasgians of Lemnos.
- 496 Miltiades III returned to the Chersonese.
- 493 " " left the Chersonese and was tried at Athens.
- 489 Isagoras, archon 508/7, was perhaps present at the second trial of Miltiades III.

For the help which I have received in writing this article please see the acknowledgement in *C.Q.* NS vi. 53.

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¹ G. M. A. Richter, *Attic Red-figured Vases* pp. 59 f.; Nachod, *R.E.* 'Stesagoras' 2457 (1946), p. 44 with refs. in n. 21; E. Langlotz, *Zur Zeitbestimmung der str. Vasenm.* (1920), (1929).

MAËS, QUI ET TITIANUS

THE farthest east on the transcontinental road to China which ancient travelers from the Mediterranean borderlands are known to have attained was reached by a party that made its way as far as the Stone Tower, a station in the region of the Pamirs, not far from the watershed between the Mediterranean and the Yellow Seas.¹ This expedition was organized by a member of an old business family, named *Μᾶς ὁ καὶ Τιτιανός*, and described as *ἀνὴρ Μακεδών*. The only reference to Maes in ancient literature is in a brief notice by Ptolemy (i. 11. 7), which he derived from his main source, the geographer Marinus of Tyre. Can we find out anything more about this great entrepreneur?

1. *The nationality of Maës.* The natural base for his expedition was Syria. Presumably, therefore, he was a native of that country, and he was a 'Macedonian' only in the derivative sense of a person of Macedonian origin, or of a *civis optimo iure* in some Hellenistic city of the Near East.² From the hyphenated style of his name (*ὁ καὶ Τιτιανός*) it has been inferred by Kubitschek³ that he was a native of Egypt, where the earliest examples of such nomenclature have been found. Yet it was not long before the same style became common in Syria and Asia Minor ('Saul who is also called Paul').⁴ Nay more, Kubitschek went far to demolish his own case in pointing out that Maës was a Semitic name, which recurs in romanized form in Iulia Maesa, the grandmother of Elagabalus and Severus Alexander (a native of Emesa). We need not therefore doubt that Maës was a Syrian.

2. *The purpose of his expedition.* A route across the entire length of Asia could hardly serve any purpose other than to develop the trade in Chinese long-staple silk;⁵ and this trade needed organization, so as to keep within limits the profits of middlemen, whether by eliminating lesser intermediaries from stage to stage, or by defeating the attempts of Parthian wholesale merchants to corner the traffic between the bounds of the Chinese and Roman empires. (That such attempts were made is proved by the report of the Chinese trade-envoy Kan-Ying (A.D. 97), which mentioned that the Parthians impeded his efforts to reach Roman territory.)⁶ To attain this end, it was clearly in Maës' interest to establish contact with the Chinese; and it is significant that the Stone Tower, to which his party pushed on, was situated in Chinese Turkestan, i.e. the borderland to which every strong Chinese dynasty has sought to advance its frontier. It may therefore be assumed that Maës' main object was to streamline the traffic in Chinese silk.

3. *The date of Maës.* This is usually placed between A.D. 100 and 120.⁷ This

¹ On the location of the Stone Tower see J. Thomson, *History of Ancient Geography*, pp. 179-80; A. Herrmann, *Das Land der Seide und Tibet im Lichte der Antike*, i. 101-6.

² On the 'Macedonian' category in these towns see F. M. Heichelheim, 'Die auswärtige Bevölkerung im Ptolemäerreich', *Klio*, Beiheft 1929, pp. 28-43.

³ *R.E.*, s.v. Maës (Supplement VI, cols. 235-6).

⁴ E. Fränkel, *R.E.*, s.v. Namenswesen (XVI, col. 1663); M. Lambert, *Glotta*, 1914, pp. 131 ff.

⁵ Finds of Mediterranean glass in China, Korea, and Japan indicate the nature of one Roman counter-export. (C. Seligman, *Antiquity*, 1937, pp. 15 ff.)

⁶ See § 32 of the translated text in W. H. Schoff, *The Periplus of the Erythraean Sea*, pp. 275-6.

⁷ So by Herrmann, *R.E.*, s.v. Seres (IIA, col. 1680)—c. A.D. 100; R. Hennig, *Terrae Incognitae*, i. 337—probably 100-5; E. H. Warmington, *The Ancient Explorers*—c. 120; G. F. Hudson, *Europe and China*, p. 39—first half of the second century.

chronology is based on (a) the date of the geographer Marinus, (b) the condition of affairs in China at the time.

(a) The date of Marinus may be inferred with approximate certainty from the extensive list of place-names which Ptolemy (according to the generally received opinion) drew from this, his usual source. In this list names that indicate a Trajanic date (i.e. containing the element 'Traiana' or 'Ulpia') are frequent, whereas there is no sure instance of a Hadrianic foundation.¹ On this evidence Marinus' work can hardly be dated later than c. A.D. 120-5, and this will accordingly be the *terminus ante quem* for Maës' enterprise.

(b) The history of China in the first century A.D. is a record of repeated internal disorders, which led to a weakening of its inland frontiers and to incursions of Kushan nomads, who established themselves c. A.D. 50 in East Turkestan and the Tarim basin, and thus cut clean across the transcontinental road, so as to render regular trade between China and the western world virtually impossible.² But c. A.D. 75 a revived Chinese empire recovered and consolidated its land frontiers, thus creating better opportunities for through traffic; and the report, mentioned above, which Kan-Ying wrote in A.D. 97 on political and economic conditions in 'Ta-Tsin' (which is now generally identified with Roman Syria), is clear proof that the Chinese government of this period sought to extend the range of its export trade to Mediterranean lands. True, Kan-Ying admitted that the Parthians put difficulties in the way of his researches, and some quite erroneous items in his description of Ta-Tsin,³ which keep strange company with many shrewd observations, suggest that he worked at second hand, contaminating good sources with inferior ones. We may therefore doubt whether he got through to Roman territory in person. Yet, even so, we may assume that c. A.D. 100 the Chinese were both able and willing to foster transcontinental commerce. Here then was Maës' chance, and his date should be fitted to his opportunity.

Those scholars who determine the date of Maës by that of Marinus assume that the two men were contemporary, or were separated by a short span of time only. No doubt Marinus used the latest available survey of the transcontinental road on which he could lay hands; but can we be sure that this was of recent date? One essential condition of a survey that extended over some 2,000 miles (from the Mediterranean seaboard to the Stone Tower) being carried out was a continuous freedom from interruption or molestation of the surveying agents. But, granted that these could reckon on Chinese protection and co-operation over the last stages of the route, the real crux of the problem was whether they could expect similar favourable treatment within the Parthian empire, through which by far the greater length of their journey extended. But, to say nothing of the recurrent disorders which punctuated the internal history of Parthia, its Arsacid rulers, as we have seen, had a vested interest in keeping the transit trade in their countrymen's hands; and if they took measures to prevent the Chinese from prying into their concerns, although these never had any imperialistic designs on Parthia, *a fortiori* they would seek to curtain off the Romans, whose usual relations with them were alternately of suspicious coexistence and of violent collision. The only occasions on which one would expect the Parthians to have shown themselves co-operative were (1)

¹ Honigsmann, *R.E.*, s.v. *Marinus* 2 (XIV, cols. 1767-8).

early Roman Empire see, besides the works of Herrmann and Seligman, Hudson, *op. cit.*, ch. 1.

² On Chinese affairs at the time of the

³ See §§ 12, 20, 32.

after the termination of their war with Trajan (A.D. 117), (2) at the close of their war with Nero (A.D. 65), and (3) after their settlement with Augustus (20 B.C.). But the second of these dates may be ruled out, because of the then prevailing disorders at the Chinese end of the road; and if Maës' expedition is assigned to the second century it should not be dated *c.* A.D. 100, but after the accession of Hadrian. In this case, either the expedition was a very recent event when Marinus wrote his history, or it was a century old.

The conditions which Maës' party would have found on the Chinese border, if it had set out after 20 B.C., are a matter of uncertainty. But the Kushans did not definitely take possession of Chinese Turkestan until the opening years of the Christian era. This should leave a sufficient interval for Maës' venture (say 20-1 B.C.).

At this period Romans and Parthians had entered on a fifty years' spell of peace which offered a good opportunity of trade negotiations, to be followed by an expedition such as that of Maës. Moreover a clue to the actual date of the expedition may perhaps be found in Maës' second name. The form of this name, Titianus, clearly implies that he had enjoyed the patronage of some powerful member of the gens Titia. A natural assumption is that he obtained Roman franchise through the good offices of a Titius, and this is confirmed by the occurrence of a family of Maesii Titiani in our records of A.D. 150-210.¹ It is an even more inviting conjecture that Maës was first brought into connexion with his patron of the gens Titia through his business operations. From the magnitude of his enterprise—his survey of a trade route of some 2,000 miles invites comparison with the activities of the Strathconas, the J. J. Hills, and the Leland Stanfords in spanning North America with railroad lines—we may surmise that he could not have achieved it without some influential backing. It is surely significant that the other two notable pioneers of commerce under the Roman Empire, of whom we have a record, were an anonymous Roman *eques* who cut across central Europe from Carnuntum to the Baltic amber coast, and a man of servile origin who undertook a cruise round Arabia—only to be carried off by northerly winds to Ceylon—were merely agents of more powerful personages. The knight was sent on his errand by Nero's minister of sports, and the freedman stood in the service of a farmer of Red Sea revenues (who had no doubt authorized his agent's cruise outside his regular beat).² *A fortiori* Maës' private capital fund might well have been inadequate; and it is hardly credible that his personal influence should have been sufficient to secure the willing co-operation of Parthia's government and business men.³

Now the list of Titii registered in *P.R.I.* and *R.E.* includes one figure of major importance, M. Titius L. f., who was consul suffectus in 31 B.C. and became governor of Syria *c.* 13 B.C.⁴ The chief event of his governorship was a meeting with the Parthian king Phraates IV, who was bent on cushioning his uncomfortable throne with the prestige of a closer *amicitia* with the Roman emperor and therefore sent two of his sons to Rome for a good Etonian education.⁵

¹ *P.R.I.*, M, nos. 58-69; *R.E.*, s.v. Maesius (XIV, cols. 281-3—13 names). The Maesii Titiani were domiciled in Italy and Sicily, and apparently were not engaged in trade. But presumably they derived their citizen status from the original Maës qui et Titianus.

² Pliny, 37. 45; 6. 84.

³ The problem here involved has been

hinted at by Thomson (pp. 291-2) and openly expressed by Hudson (p. 85).

⁴ *P.R.I.* T, no. 196; *R.E.*, s.v. Titius no. 18 (XVIII, col. 1559). For the date of his governorship, see T. Corbishley, *J.R.S.* 1934, pp. 43-49. None of the later Titii appears to have been interested in eastern commerce.

⁵ Strabo, p. 748.

It was Titius who received the princes, and here was a challenging opportunity for exercising a little gentle pressure on the Arsacid monarch, so that no obstructions should be put in the way of Roman trade missions. It does not therefore seem fanciful to assume that the Roman grandee came to a fruitful agreement with a native merchant of large ideas and courageous enterprise.

We may go a step further and consider whether Titius had a warrant from Augustus himself to seize this occasion to further trans-Asiatic trade. Of the emperor's attitude to this traffic in particular we know nothing definite, but it is certain that of all Roman emperors he pursued the most actively mercantile policy. His interest in trade with India is betokened by the four successive embassies from Indian princes which he entertained,¹ and by the severe measures which he took to suppress the Sabaeen monopoly of transit trade with India when he subdued and perhaps occupied the port of Aden (c. 1 B.C.)², so that commerce between India and Egypt, hitherto spasmodic and precarious, became established on a regular basis.³ His eagerness to acquire the overland perfume trade of Arabia is revealed in the 900 miles' march of Aelius Gallus to the Yemen country (24 B.C.)—an achievement comparable with that of Maës' survey party.⁴ At the least, therefore, we may say that, even without Augustus' express authorization, Titius could have reckoned on the emperor's tacit approval, if he were to engage Roman diplomacy on behalf of Maës.

Failing Augustus himself, Maës might have received encouragement from Titius' predecessor in the governorship of Syria, the emperor's right-hand man Agrippa. Whether Agrippa took an active interest in trade is uncertain, but his devotion to geographic studies is sufficiently attested by the terrestrial globe which he set up in Rome, and by his Commentaries thereon, the most notable treatise on geography by a Roman writer. An extension of geographic knowledge, such as was actually the most lasting gain from Maës' expedition, would certainly have met with his favour. It may have been Agrippa who initiated the plan of sending out Maës' party, and Titius who gave it practical effect.

The report on the transcontinental route which Maës' men drew up invites comparison with the extant itinerary known as the *Σταθμοὶ Παρθικοὶ* of Isidorus of Charax, which went over much the same ground—from Zeugma on the Euphrates to Alexandropolis in Arachosia (Kandahar).⁵ If we could accept the estimate of C. Müller,⁶ that this work is of Augustan date, we might be tempted to find a connexion between it and Maës' road book, and to claim the latter as a contemporary work. But the evidence for the life and work of Isidorus is so tenuous and ambiguous that his date remains uncertain.⁷

It may be asked, if Maës undertook his trade mission under such favourable circumstances and acquired much accurate knowledge about the road to the Far East, why did he fail to establish a permanent and regular movement of commerce across Asia? The answer may be found in the Kushan invasion in the opening years of the Christian era, which had the effect of cutting communications between China and the western world for more than half a

¹ For Roman relations with India see E. H. Warmington, *The Commerce between the Roman Empire and India*.

² On the expedition to Aden see M. P. Charlesworth, *C.Q.* 1928, pp. 98-100.

³ Strabo, p. 798.

⁴ *Ibid.*, pp. 780-2.

⁵ See W. H. Schoff, *The Parthian Stations of Isidorus of Charax*.

⁶ *Geographici Graeci Minores*, i, p. lxxxv.

⁷ Weißbach, *R.E.*, s.v. Isidoros, no. 20.

century. The fruits of Maës' work could not be gathered until a revived Chinese empire restored the *pax Sinica* which was indispensable to organized intercourse from sea to sea.

A definite choice between the two most likely dates for Maës' expedition—the middle period of Augustus' reign, or shortly after the accession of Hadrian—cannot perhaps be made on present evidence. But the Augustan date may require serious consideration.

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PYTHAGORAS OF SAMOS

THE influence which the Pythagorean society and its leading doctrines exercised upon Athenian intellectual and political developments in the late fifth century leads us to seek in Pythagoras a figure of greater stature and more clear-cut features than modern scholarship is prepared to allow. To us he is a great name but little more, the large body of detailed information about his life which is available in later writers being dismissed as fabulous. This scepticism was reasonable enough when the reader was faced with the garbled hotch-potch of an Iamblichus or a Porphyry. But since the task has been put in hand of determining what portions of this tradition can safely be attributed to the various authorities who concerned themselves with the Pythagorean story in the fourth century, and of considering the respective historical value of these authorities,¹ the scepticism of, for example, Burnet's account becomes unjustified. It is now possible to present a fairly detailed account of Pythagoras' activity, which has at least as much claim to credence as a great deal of what we now readily accept as ancient history, and is furthermore consistent with the general picture of the man that emerges from a careful scrutiny of classical sources. Not only for its own sake, but in the context of the increasingly fruitful investigation of fifth-century Athenian movements, I feel that it may be useful to put together such an account of Pythagoras. It will certainly be regarded by some as mere fiction, but may nevertheless provide others with a convenient summary of what the fifth- and fourth-century writers thought and believed about a man and a movement that had profound influence upon their times. I hope at the same time to suggest some links between what Pythagoras thought and did and the main tradition of Greek social behaviour. If Pythagoras was, as I believe, not so much an innovator as a reformer and developer of some of the central institutions of Greek life, the possibility will be opened of regarding various phenomena in mainland Greece which we have been asked to call Pythagorean, e.g. the Socratic *phrontisterion* as it appears in the *Clouds*, not as deriving from Pythagoras but as a parallel growth to the Pythagorean *synedria* and nourished by the same root.

I shall first set out the contemporary and near-contemporary evidence (I); then proceed to the more detailed accounts which derive from Aristoxenus, Dicaearchus, Eudemus, and Timaeus (II); and finally attempt to determine the teaching that Pythagoras gave to his associates at Croton (III).

I

The poet Xenophanes, who must have been Pythagoras' contemporary, appears to have described him, in two elegiac couplets, as a person who believed in the transmigration of souls.² Ion of Chios,³ in the next century, is quoted as saying that Pherecydes 'was endowed with manliness and honour and enjoyed after death a happy existence, if Pythagoras the wise is to be believed, who more than all other men perceived and learnt men's opinions'. Ion here, besides

¹ e.g. the careful work of K. von Fritz, *Pythagorean Politics in Southern Italy*, Col. U.P. 1940.

² Diels-Kranz (hereafter DK), B 7; cf. Heraclides Ponticus fr. 89 W. also Dicae-

archus fr. 36 W. and Aristoxenus fr. 12 W. See Kranz, *Hermes* lxi (1934), 227.

³ Fr. 30 von Blumenthal. See Kranz, loc. cit.

attesting Pythagoras' belief in the immortality of at any rate Pherecydes' soul, is making a literary allusion to Heraclitus' derogatory remark about Pythagoras:¹ that 'he practised inquiry of all men the most, and making a selection composed from these writings his own wisdom, a knowing of many things, a base concoction'. Heraclitus had attacked this 'knowing of many things' on another occasion² when he declares that it does not teach wit: 'if it did, it would have taught Hesiod and Pythagoras, Xenophanes and Hecataeus'. Again,³ Heraclitus calls Pythagoras 'the prince of swindlers'. Ion of Chios⁴ also charged Pythagoras with dishonesty, but for a different reason. He wrote, Ion said, some pieces and 'fathered them upon Orpheus'.

So far the witness has been hostile. Even Xenophanes' picture is ironical, and the doctrine of transmigration is quoted to be attacked.⁵ Empedocles,⁶ on the other hand, speaks in glowing terms of his supernatural insight, and Herodotus,⁷ perhaps rather grudgingly, recognizes him as 'not the weakest *sophistes* among the Greeks'.

This early evidence is enlightening in its implications. Pythagoras is a wise man with a professional repertory of wisdom. He is classed with poets like Hesiod and Xenophanes, and 'inquirers' like Hecataeus. He is a writer, even if the works mentioned were 'fathered on Orpheus'. To his admirers he is a man of supernatural gifts and power, to the sceptical a charlatan.

The teaching with which Pythagoras is associated at the outset concerns the fate of the soul after death. In this connexion we must first consider the passage in Herodotus (2. 81) where, referring to the Egyptian taboo on the use of wool in temples or in burial, he asserts that in this respect the Egyptians 'agree with the people called Orphic and the Pythagoreans',⁸ i.e. presumably those who had been initiated under the patronage of Orpheus or Pythagoras.⁹ Now Aristophanes in the *Frogs* puts into the mouth of Aeschylus the claim that Orpheus was a benefactor of society because he 'showed *teletai* to us and bade us refrain from slaughter'. This ban on bloodshed is properly connected with the civilization of the *telete* by the omission of *omophagia*, which was an element in the Cretan and Dionysiac form; but the ban was also a universal one, and is to be regarded in the light of two related ideas: the belief that animals as well as men have souls, and the expectation of a judgement of souls, for their injustices to each other, in Hades. So a 'soul-less', i.e. vegetarian, diet is shown in Euripides' *Hippolytus* (952 f.) to have been prescribed for the followers of Orpheus, who were, it appears there too, merely the readers of the Orphic books. And Plato, in the *Laws* (6. 782 c), attributes a similar abstinence to 'Orphic lives'. When the fourth-century speech *Against Aristogeiton* mentions 'the dreadful and inexorable Dike whom Orpheus, the revealer to us of the most holy *teletai*, says sits beside the throne of Zeus and surveys all the works of men', we find it difficult not to regard also as Orphic 'those ancient and sacred stories' mentioned by Plato in the seventh letter¹⁰ 'which proclaim that our soul is immortal and has judges and pays full requital for its deeds as soon as a man has left his body behind'. If the Orphic *logoi* taught these doctrines, it is not surprising

¹ DK, B 129.² DK, B 40.³ DK, B 81.⁴ Fr. 24 von Bl.⁵ Diogenes Laertius 9. 18.⁶ DK, B 129.⁷ 4. 95.⁸ Following Linforth (*Arts of Orpheus*, 1940, pp. 39 ff.) and Nilsson (*Harvard Theological Review*, 1935, p. 206, n. 93) I omit(with MSS. A, B, and C) the words *καὶ βακχικοῖσι εἶδαι δὲ Αἰγυπτίοισι*.⁹ Cf. the phrase of Proclus in *Plat. Tim.* 42 c, d (O.F. 229): *οἱ παρ' Ὀρφεὶ τῷ Διονυσῶ καὶ τῇ Κορῇ τελούμενοι*.¹⁰ [Dem.] 25. 11, *Plat. Ep.* 7. 335 a.

that those who had been instructed in them would have refrained from using wool in the burial of the dead, since it constituted such damning evidence of an act of *adikia* against a living creature. When Herodotus ascribes this taboo to the Pythagoreans as well, he must be crediting them with the Orphic doctrine of the survival of the soul and its judgement. In the Platonic myths the soul's judgement is a prelude to its reincarnation. Since we know that Pythagoras taught the transmigration of souls, it is likely that reincarnation follows the soul's judgement in Orphic and Pythagorean doctrine also.

Later in the same book Herodotus refers specifically to the doctrine of the soul's immortality (2. 123). He has been speaking of an Egyptian *logos*¹ which declares that 'the soul of man is immortal and that, when the body perishes, it clothes itself with another living creature which constantly comes to be'. He then remarks: 'Certain of the Greeks made use of this *logos*, some formerly, others latterly, claiming it as their own. I know their names but do not record them'. When we compare this statement with his earlier remarks about the taboo on wool, we can observe that the doctrines implied in the latter (i.e. the soul's survival, [judgement], and reincarnation) are explicitly stated in the former; but that, whereas in the earlier passage he speaks of the Orphics and Pythagoreans, in the later one he conceals the names, probably out of deference to the feelings of the Athenians, who would not like to hear the founder of the Eleusinian mysteries² called an impostor. We are familiar with such charges against Pythagoras in the fifth century. The identification of 'some formerly, others latterly' with the Orphics and Pythagoreans is made all the more probable by the circumstance that Heraclitus says openly what his younger contemporary hints at, that Pythagoras claimed as his own knowledge what he got from others. And Ion's statement that Pythagoras fathered writings on Orpheus only underlines the identity of doctrine which Herodotus noticed in the case of the doctrine of the soul.

The idea of the soul's immortality and successive reincarnation which probably belonged to the Orphic *logoi* and later formed a part of the Pythagorean teaching is expressed with peculiar vividness at the end of the first quarter of the fifth century by Pindar in the second Olympian,³ at a time when Pythagorean ideas might be expected to be dominant in Western Greece.

'And the sins committed in this realm of Zeus are judged by One who passeth sentence stern and inevitable; while the good, having the sun shining for evermore, for equal nights and equal days, receive the boon of a life of lightened toil, not vexing the soil with the strength of their hand, no, not the water of the sea, to gain a scanty livelihood; but in the presence of the honoured gods, all who were wont to rejoice in keeping their oaths share a life that knoweth no tears, while the others endure labour that none can look upon. But, whosoever while dwelling in either world, have thrice been courageous in keeping their souls pure from all deeds of wrong, pass by the highway of Zeus unto the tower of Cronus, where the ocean-breezes blow around the Islands of the Blest, and flowers of gold are blazing, some on the shore from radiant trees, while others the water fostereth; and with chaplets thereof they entwine their hands, and with crowns, according to the righteous councils of Rhadamanthys, who shareth for evermore the judgement-seat of

¹ Possibly that mentioned at 2. 81.

² See Eur. *Rhesus* 941 ff.

³ 58 ff. I give the translation of Sir J. E. Sandys in the Loeb edition.

the mighty Father, even the Lord of Rhea with her throne exalted beyond all beside.'

This 'world below' in which the blessed dwell is also described by Pindar in a fragment;¹ and another fragment² speaks of the final reincarnation of those who have paid certain penalties, and describes them as a special category of human beings: 'august monarchs, and men who are swift in strength and supreme in wisdom. And for all future time men call them sainted heroes.' Ion of Chios, as we have seen, is evidence that Pythagoras claimed such a peculiar status for Pherecydes; and Aristotle appears to have said³ in his work on the Pythagoreans that among their secret doctrine was the distinction of three kinds of reasonable creature, God, man, and beings like Pythagoras. Aristotle seems to have related many stories of his supernatural powers, introduced with the dry statement that: 'he did not refrain from the wonder-working of Pherecydes'. At Agragas in Sicily in the fifth century we find Empedocles holding similar views of the successive reincarnation of the soul and of a special type of men, and claiming himself to belong to this number.⁴

One further general trait of Pythagoras' activity is provided by early-fourth-century evidence. Isocrates, in the *Busiris*,⁵ supports the usual story that Pythagoras went to Egypt and, learning from the Egyptians, 'brought back philosophy in general to the Greeks and also paid particular attention to sacrificial and purificatory matters of ritual, thinking that even if he did not get much advantage of them from the gods, he would at any rate get out of them a great reputation among men. And this is just what happened; for he far surpassed everyone in reputation, so that all the younger men wanted to be his pupils and the older men would rather see their sons sitting at his feet than managing their own affairs. The truth of this is indisputable, for even now greater respect is paid to those who claim to be his disciples in their silence than to those who have the greatest reputation for speaking.' The imputation of a cynical regard for worldly interest and of deliberate pose is a characteristic of such accounts which need not be taken seriously. The weight of the testimony lies in the confirmation of what we already know of Pythagoras' interest in 'sacrificial and purificatory matters' and, in particular, in the assertion of his activity as an educator. This activity is the subject of a famous passage of Plato's *Republic*⁶ where Socrates is inquiring whether Homer has benefited men either as a community or individually. He comes to the conclusion that he has not benefited men in general either as a lawgiver, or in war, or as an inventor of ingenious contrivances like Thales or Anacharsis. If not in general, has he, Plato asks, benefited them individually by being a leader of education (*hegemon paideias*) and founder of a way of life, 'which was the reason for Pythagoras' exceeding popularity and why people subsequently even to the present day are conspicuous calling their way of life Pythagorean'?

Plato thus goes even further than Isocrates and calls him not only a particularly successful and attractive educator, but a man whose educational activity was sufficiently famous to earn him the title of the founder of a way of life. Here we recollect the remark of Plato in the *Laws*⁷ that at the beginning of civilization 'those of us who existed then live the sort of lives that are called Orphic, which involved use of everything without soul and abstention from

¹ 114 a-c Bowra.

² 28 ff.

³ 127 Bowra.

⁶ 10. 600 b.

³ Fr. 192 R.

⁷ 6. 782 c.

⁴ DK, B 146.

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everything "ensouled"'. The 'Orphic life' was probably revealed through books as the preliminary instruction to a *telete*; so the Pythagorean life, which appears to have placed similar emphasis on ritual purity, is the result of Pythagoras' teaching. The use of the more ordinary word *paideia* should not disguise the fact that the Pythagorean teaching has still many of the characteristics of a *telete*.

The story of Salmoxis in Herodotus must also be taken into account. Although this story is not direct evidence for Pythagoras it has, as Minar has seen,¹ important implications bearing upon Pythagoras' life in Samos. The story runs as follows:²

'As I learn from the Greeks that inhabit the Hellespont and Pontus, this Salmoxis was a man who was a slave in Samos, and the slave of Pythagoras, the son of Mnesarchus. He then became free and earned a large fortune with which he returned to his own country. Now the Thracians have a low standard of life and were rather unintelligent, while this Salmoxis understood the Ionian manner of life and more civilized customs than the Thracians knew, inasmuch as he had lived in Greece and in the household of Pythagoras, who was not the weakest wise man there. He accordingly prepared a men's hall, and in it entertained the chief men of the country and, while feasting them, used to teach that neither he himself nor his guests should die, nor their children after them, but that they would come to a place where they should live for ever in the enjoyment of good things. Now all the time that he was doing what I have described and saying these things, he was making an underground chamber. And when the chamber was completed he disappeared from among the Thracians, and went down into his underground chamber and stayed there for three years. The Thracians missed him and mourned him as dead; but after three years he appeared to the Thracians, and so they came to believe all that Salmoxis had said. Thus they say that he did. And I myself am neither unduly sceptical nor unduly credulous about the underground chamber, but I do think that Salmoxis lived many years before Pythagoras. However, whether there was a man called Salmoxis or this is the name of a local Getan *daimon*, I have said enough about him.'

If Herodotus had a literary source for this story, it may well have been his contemporary Damastes of Sigeum, who might rank as one of the 'Greeks who inhabit the Hellespont and the Black Sea' and wrote 'about poets and sophists'.³ The tone of Ionian scepticism is similar to that which we have noticed in Isocrates' mention of Pythagoras. But whether the source is literary or not, Herodotus seems to present us with the spectacle of Greeks explaining, in terms familiar to themselves, a Getan institution linked with the name of Salmoxis, with which they, as neighbours, had come in contact. This institution had three features: the name Salmoxis, the men's house in which instruction was given after a meal, and an underground chamber through which, in the ritual myth, Salmoxis gained contact with supernatural knowledge in the world below, particularly with regard to the fate of the soul there and its immortality. We may recognize in such an institution and its 'hero' a parallel

¹ E. L. Minar, Jr., *Early Pythagorean Politics in Practice and Theory*, Baltimore, 1942, p. 4.

² 4. 95 f.

³ See *F. Gr. Hist.* i. 5. In Suidas he is a contemporary of Herodotus. He was a pupil of Hellanicus and one of his works had the title *περί ποιητῶν καὶ σοφιστῶν*.

to the Orphic *telete* and its founder. The Greeks of the north-east colonial area saw, in some respect at any rate, a parallel with Ionian customs and Pythagoras. The Ionian customs in question were the meals of the *agathoi* in the men's house and the function of the *sophistes* therein.¹ Pythagoras they knew primarily as a teacher of immortality of the soul. It was therefore a comparatively simple matter to explain the Getan institution as having come about through Salmoxis having been a slave of Pythagoras in Samos, and the underground chamber as an ingenious device whereby the ex-slave imposed upon his simple countrymen. The result is a pleasant story in the vein of the Ionian raconteur; and Herodotus does not allow his evident sympathy with such treatment to stifle his awareness of its untruth. The caution, with which we have already seen him approach matters connected with *teletai*, forbids him to say much about the underground chamber, but he gives it as his opinion that Salmoxis 'lived many years before Pythagoras', and offers a broad hint that he was in fact 'a local Getan *daemon*'. Elsewhere² he speaks of Salmoxis as the Thracian god to whom the Thracians believe they go at death. Strabo speaks of his abode in 'a cavernous place' in Mt. Kogaionon.³ We have excellent evidence that an underground chamber was a feature of at least one *telete* in Greece, that of Trophonius at Lebadeia;⁴ and the ritual myth of the Eleusinian *telete* concerns the descent and return of Persephone from the lower world. We are therefore able to discern the Getan cult as an example of a teletic initiation complete with all the various features we associate with the relics of such social behaviour in Greece. In the more primitive conditions of the Thracian tribes, as in Africa in modern times, the institution had remained intact.

The inferences to be drawn from the Salmoxis tale in Herodotus are two-fold. We are able to discern the real nature of the Getan cult. But we are also able to reach some conclusions with regard to Pythagoras himself and his activity in Samian society before his departure for Croton. The Greeks saw a connexion between Pythagoras and a Getan institution which included a meal and instruction by a *sophistes* in the doctrine of immortality. The reason must be that Pythagoras in Samos had given such instruction to the leading citizens in the men's hall. The function of the poet in the common meals of Ionia and Sparta had been mainly political and military. Pythagoras' teaching of immortality, though paralleled in the teletic instruction of Eleusis and elsewhere, would seem a new departure in the recitation of the Ionian men's hall. But it appears that this new teaching was directed to the old object. The *Life of Pythagoras*, ill compiled from various sources by Iamblichus, contains a reference to the story of Salmoxis which seems to go beyond what Herodotus tells us and to derive from Herodotus' source rather than Herodotus himself. After speaking of the lawgivers who were Pythagoras' pupils, Iamblichus asks why we should be surprised at them, since they had excellent opportunities of up-

¹ Cf. Alcman, p. 71, Diehl: 'at feasts and in the confraternities of the men's halls (*ἀνδρεία*) it is fitting to strike up a paean before the face of the diners'. These were admittedly not Ionian occasions: but Callinus and Xenophanes exhorted the *véoi* at their banquets: and Alcaeus, p. 54, speaks of a great hall at Lesbos decorated with arms and armour which reference to Hdt. i. 34, where arms are said to hang on the walls of the

men's rooms (*ἀνδρεῶνες*), shows to be an *andreion*. See D. L. Page *Sappho and Alcaeus*, p. 222.

² 4. 94.

³ 298, see Rohde, *Psyche*, Eng. tr., p. 279.

⁴ See Aristophanes, *Clouds* 507 f. *ὡς δέδοικ' ἐγὼ εἶσω καταβαίνων ὥστερ' ἐς Τροφονίου* and the very full account in Guthrie, *The Greeks and their Gods*, pp. 224 ff., including a translation of the descriptive passage in Pausanias (9. 39 ff.).

bringing and education. More surprising is Salmoxis who 'was a Thracian and became enslaved to Pythagoras and listened to his discourse. He laid down laws for them as we have indicated at the beginning and exhorted the citizens to manliness by persuading them that the soul is immortal.' Even now the *Galatai* and *Tralleis* and the majority of the barbarians believe in immortality and do not fear death.

The phrase 'as we have indicated at the beginning' is, as Rohde observed,¹ coolly quoted by Iamblichus from his source, although Iamblichus himself has not mentioned Salmoxis' law-giving before. We see immediately that we have before us a direct quotation from a document which, in view of its close similarity and greater detail than Herodotus' account, may very well be Herodotus' source itself, the account deriving from 'the Greeks who inhabit the Hellespont and the Black Sea'. In any case the connexion between the doctrine of immortality and manliness clearly made by Iamblichus' source² deserves consideration, since it seems to clinch the identification of the Ionian poet of the common meal, who exhorts his hearers to military prowess, with the *sophistes*, who in the men's hall teaches the immortality of the soul.

II

Herodotus' and Heraclitus' knowledge of Pythagoras probably means that he had a reputation as a *sophos* before he migrated to southern Italy;³ and the immediate recognition he appears to have received on arrival seems to confirm this inference. The rest of our information about his life in Samos, his travels and migration to Croton, and his career in south Italy is derived in the main from the fourth-century writers, Aristoxenus, Dicaearchus, Eudemus, and Timaeus. Aristoxenus is a biased witness. He knew⁴ the last of the Pythagoreans, who left Archytas behind at Tarentum and migrated to the mainland of Greece in the first decade of the fourth century; and was concerned to defend them against their calumniators. Timaeus is quite a different proposition. As Fritz observes,⁵ he 'had not the first-hand information which Aristoxenus obtained from the last Pythagoreans. But on the other hand there is no trace in his work of any bias either against or in favour of the Pythagoreans such as Aristoxenus so conspicuously displays. But what is more important: over both Dicaearchus and Aristoxenus he has the enormous advantage that he deals with the Pythagoreans within the framework of a general history of south Italy, so that he has to correlate and check in all directions.' A Timaeus passage⁶ quotes in evidence 'memoirs of the Crotonians' and 'oaths deposited at Delphi'. Dicaearchus and Eudemus have, as far as we know, no special claim to reliability and represent the traditional account of the Pythagoreans as preserved in the Aristotelian school. It is clear, then, that of the fourth-century sources Timaeus is the most reliable. There are unfortunately only a very few fragments, four in all, concerning Pythagoras, which are expressly quoted from Timaeus;⁷ but his history, remoulded and combined with other sources to a greater or lesser degree, lies behind the accounts of Polybius,⁸ Iustinus,⁹ Strabo,¹⁰ and

¹ *Rh. Mus.* xxvii (1872), 49.

² See also a similar connexion of thought in Lucan's account of the Druids' doctrines: *Phars.* 1. 452-62.

³ So Minar, *op. cit.*, p. 5.

⁴ Aristoxenus *fr.* 19 W.

⁵ *Op. cit.*, p. 66.

⁶ See below, pp. 148 f.

⁷ *F Gr Hist.* 566 F 13, 14, 17. 131.

⁸ 2. 39.

⁹ *Pompeii Trogi Hist. Phil. Epit.* 20. 4. 1 (Seel, Teubner, 1935).

¹⁰ 14. 638.

Apollonius of Tyana.¹ Fritz has examined with great acumen the degree in which these accounts reflect Timaeus and his conclusions are accepted for the most part in the account of Pythagoras' life which follows.

Diogenes Laertius² quotes Aristoxenus as having said in his book about Pythagoras and his friends that Pherecydes was buried by him at Delos. The very similar wording of a passage in Porphyry³ concerning the same incident shows that Porphyry too is quoting the same source, but Porphyry adds that, after burying Pherecydes, Pythagoras went back to Samos because he wanted to associate with Hermodamas the Creophylian.⁴ We are then able confidently to place this incident before Pythagoras' migration;⁵ and to regard Pythagoras' early connexions with poetic wisdom, attested in Iamblichus and Porphyry, as reasonably certain, more certain at any rate than the stories in Iamblichus and Porphyry of his meeting with Thales and Bias.⁶

Strabo, based, Fritz argues,⁷ on Timaeus, says: 'they relate that in his time Pythagoras too, seeing a tyranny getting under way, left the city and travelled to Egypt and Babylon for the sake of learning, and that when he returned thence and saw that the tyranny was still in being he sailed to Italy and there ended his life'. Since Polycrates' tyranny at Samos began about 540⁸ and ended shortly after 525, we can hereby reach an approximate dating for Pythagoras' movements: he left Samos about 540 and returned any time before 525. Fritz has noted that Iamblichus' version⁹ which brings Pythagoras back to Samos after Polycrates' death diverges from Timaeus to fall in with a chronology by which Pythagoras spent twenty-two years in Egypt and in Babylon. This requirement of a long stay in Egypt and Babylon creates such great difficulties that it must be rejected. Fritz supposed it a later invention. Once this obstacle is removed, the quotation from Aristoxenus in Porphyry¹⁰ can conveniently be fitted into the story: 'Aristoxenus says that when Pythagoras was forty years of age and perceived that the tyranny of Polycrates was so oppressive that it was fitting for a man of liberal habits not to tolerate such an authoritarian régime, then indeed he migrated to Italy.' He was then, on good authority, forty years of age at the time of his migration. This age is always a suspicious one in chronology and too much stress should not be laid on its accuracy. What is probably to be accepted as correct is that Pythagoras was neither young, i.e. under thirty, nor old, i.e. over fifty, when this step was taken. The conversion of these data into an absolute chronology can only be attempted after consideration of the evidence of his activity in Croton, the city of his adoption.¹¹

¹ ap. Iamblichum, *V.P.* 254-64.

² I. 118. A2, fr. 14 W. ³ *V.P.* 15.

⁴ Cf. also Aristotle fr. 191 R. for P.'s connexion with Pherecydes.

⁵ Iamblichus, *V.P.* 248, is evidence that there were some who said that P., when he left Croton at the time of the first conspiracy against the Pythagoreans, went to Delos to bury Pherecydes. In Porphyry (*V.P.* 56) this account is specifically rejected on the authority of Dicaearchus and of ἀκριβέστεροι.

⁶ Apollonius of Tyana (Porph. *V.P.* 4) is evidence that he was a pupil of Anaximander.

⁷ Op. cit., pp. 53 ff.

⁸ Mary White in *J.H.S.*, 1954, pp. 36 f. argues that the Samian tyranny began under

Polycrates' father and that Pythagoras may have reached Italy as early as 550, in time to be responsible for the 'incuse' coinages which appear about that time. This early date does not seem to me to fit the course of events in southern Italy.

⁹ 11 and 28.

¹⁰ Fr. 16 W. ap. Porph. *V.P.* 9.

¹¹ The traditional dates are fairly consistent. Diodorus (10. fr. 3) says that P. 'was recognized' in the 61st Olympiad, when Thericles was archon at Athens, i.e. in 533. Iamblichus (*V.P.* 35) says that he came to Italy in the 62nd Ol., i.e. 532-529 (see Jacoby, *Apollodorus Chronik*, pp. 218 ff.). D. L. (9. 45) states that his *akme* was in the 60th Olympiad, i.e. 540-537.

Aristoxenus¹ is almost certainly behind the whole of the highly coloured and unhistorical account of the effect of his arrival in southern Italy, which is found in almost identical terms in Porphyry and Iamblichus.²

'The cities in Italy and Sicily which he found on his arrival in slavery to each other, some for many years, others just recently,—these he filled with a spirit of freedom by means of those who were his disciples in each city, and effected their liberation: Croton and Sybaris and Catana and Rhegium and Himera and Tauromenium and certain others. To these he gave laws through Charondas of Catana and Zaleucus the Locrian³ and, as a result, these cities became widely famous among their neighbours. Simichus, the tyrant of Centuripini, was his disciple and gave up his throne, distributing his possessions to his sister and the people of the place. There came to him, as Aristoxenus says, Leucanians and Messapians and Peucetians and Romans. He utterly removed disagreement not only from his friends but also from their descendants for many generations, and in general removed internal and external strife from all the cities in Italy and Sicily.'

Aristoxenus emphasizes the aspect of Pythagoras as a liberator and bringer of concord. He is a biased witness; and the use of such terms in the mouth of a partisan may well be indication of a less liberal reality. In the last half of the sixth century Croton experienced vicissitudes of fortune, but ultimately emerged as the leader of a widespread economic and political empire which is known to us by a sufficient body of numismatic evidence.⁴ In the decade previous to 530⁵ she had joined an alliance with Metapontum and Sybaris to destroy Siris; and then after a period of quiescence due to a plague attacked Epizephyrian Locri. A greatly superior force of Crotoniates was defeated by 10,000 Locrians and 5,000 Rhegians at the river Sagras. Between this battle and 510 Crotoniate morale was restored; and in that year she defeated a superior army of Sybarites under the democratic tyrant Telys at the Traeis river, and annexed Sybaris. This was the beginning of a period of power and influence which lasted throughout the first half of the fifth century. We have seen how Aristoxenus lays this political change, described in partisan terms, to the door of Pythagoras. This motivation could be dismissed as unhistorical if it did not appear that Timaeus supports it with a detailed account of the 'moral rearmament' effected by Pythagoras at Croton after the battle of the Sagras. The following excerpt from Iustinus is based on Timaeus:⁶

'After this (i.e. the battle of the Sagras) the Crotonians abandoned training in the manly virtues and practice of arms. They began to hate what they had undertaken with such ill success, and would have given themselves over to self-indulgence, if it had not been for Pythagoras the philosopher. He was born at Samos son of Maratus' (presumably a corruption of Mnesarchus) 'a rich merchant, and made great progress in wisdom. He went first to Egypt, then to Babylon to learn about the movement of the stars and to study the origin of the universe, and reached the highest degree of knowledge. From there he returned and journeyed to Crete and Sparta to acquaint himself

¹ Fr. 17 W.

² Porph. 21, Iamb. 33-34.

³ A. is, of course, guilty of gross anachronism in making Zaleucus and Charondas contemporaries of P.

⁴ Kahrstedt, *Hermes*, liii (1918), 180 ff.: see Fritz, *op. cit.*, ch. vi.

⁵ See Dunbabin, *The Western Greeks*, p. 359.

⁶ *Pomp. Trog. Hist. Phil. Epit.*: 20. 4. 1. See Fritz, *op. cit.*, p. 41.

with the laws, famous at that time, of Minos and Lycurgus. Equipped with all this experience, he came to Croton; and finding the people fallen into luxurious ways recalled them by his authority to the pursuit of simplicity. He praised the manly virtues day by day; and recounted the evils of self-indulgence and the fate of cities ruined by that disease. He engendered in the common people such enthusiasm for simplicity of life that it was quite unbelievable that some of them had (recently) indulged in luxurious habits. He often held classes for married women apart from their husbands, and for boys apart from their parents. To the former he taught modesty of behaviour and obedience to their husbands, to the latter good conduct and the study of literature. And all along he recommended to everyone simplicity of life as the parent of the virtues; and such was the success of his advocacy that the married women laid aside their gold-embroidered clothes and the other ornaments of their position as the tools of self-indulgence, and bringing them all to the temple of Hera dedicated them to the goddess herself, declaring that modesty of life, not fine clothes, was the true ornament of a woman. This conquest of the women who are usually hard to influence shows the measure of his success with the younger generation. Further, 300 of the young men, bound to each other by oath like a brotherhood, lived segregated from the rest of the citizens and brought the city under their control. But the city planned to burn them when they had assembled in one house and in this disturbance nearly sixty perished and the rest went into exile. When Pythagoras had spent twenty years at Croton he went and lived at Metapontum, and there died.¹

The reliability of this graphic and highly interesting account rests chiefly on its likely derivation from Timaeus; but we may also notice that the description of Pythagoras given by Isocrates in the *Busiris*¹ seems to derive from a tradition of his teaching activity among the younger generation similar to that described in Iustinus. Isocrates recounts that 'he so far surpassed the others in reputation that all the younger generation wanted to be his disciples and the older men more readily saw their sons consorting with him than managing their own affairs. And there is no reason to doubt this story'. Dicaearchus relates the story in greater detail.² 'When he reached Italy and came to Croton, being a man of much travel and exceptional ability and personally well-equipped by nature (lit. "chance"), for he was aristocratic (*eleutherios*) in appearance and tall and in voice and character and every respect charming and controlled, he had a great effect on the city of Croton. First he won over the older men's ruling council by a long and excellent oration. Then to the young he gave, at the government's request, a series of "addresses to young men". After that, he spoke to a mass meeting of all the boys from the schools, and then to the women, for a women's gathering was arranged for him.' Iamblichus gives a very similar account and includes examples of the addresses he gave on each occasion; but we cannot identify his authorities.

There seems to be sufficient reason for believing that Pythagoras, arriving at Croton at the height of his powers and reputation as a *sophos*, was immediately required to present his credentials to the Crotoniate equivalent of the Athenian Areopagus.³ He was then invited, like Epimenides at Athens, to do

¹ 29.

² Fr. 33 W.

³ So Damon addressed, or pretended to address, the Areopagus (DK 37 B 2).

what he could to restore the city's morale. He thereupon either reformed or reintroduced into this colonial city the cultural and religious institutions of the older Greek civilization; and proceeded to give instruction to the various divisions of the younger generation, the *neoteroi*, the *gynaikes*, and the *paides*. A precious fragment of Timaeus¹ here comes to our aid and enables us to link Pythagoras' activities with the cults affecting special social groups. 'Timaeus relates that the daughter of Pythagoras when she was a girl was the girls' leader and his wife was the women's leader; and that the Crotoniates made their house the temple of Demeter and called the street "of the Muses".' These bands of girls and women devoted to the service of Demeter seem likely to be similar to the bands of Athenian women who celebrated the Thesmophoria, and like them to have received instruction during their service. The connexion of Pythagoras with the Muses is attested elsewhere. Dicaearchus² relates that he took sanctuary in the Muses' temple at Metapontum and there died. But the most interesting testimony occurs in the address which in Iamblichus he gives to the Council of the Thousand at Croton:³ 'First he advised them to found a sanctuary of the Muses so that they should preserve the existing social concord. These goddesses, he said, all had the same name, the tradition made no distinction between them, and they took most pleasure in joint rites. There was in fact always one and the same chorus of Muses, and they comprised in themselves all those things which produced concord, symphony, harmony, and rhythm. He demonstrated that their influence belonged not only to the things which are fairest to see but also to the symphony and harmony of physical nature.' The remarks about the Muses seem to imply that the Crotoniates had a cult of the Muses but that they had been in the habit of giving different names to the various persons, making a distinction between them and worshipping them separately; and that for them the chorus of the Muses had not always been one and the same. Pythagoras seems to be urging a reform in the cult. The significance of the last ground of complaint is probably to be explained when we turn to the action that the Crotoniates are said to have taken as a result of the sermon.⁴ 'When they had listened to this, they founded a temple of the Muses and sent away the prostitutes whom it was customary for them to keep, and required him to discourse separately to the boys in the temple of Apollo and to the women in the temple of Hera.' This statement, like the earlier account of his advice about the Muses, leaves a great deal unexplained. Iamblichus seems to be condensing a story which he himself does not understand. In such a connexion 'prostitutes' can only mean 'temple prostitutes'; and we must suppose that the worship of the Muses at Croton had taken a form of which traces are to be found elsewhere in the Greek world.⁵ We must remember the Muses of Hesiod who are likely to have been represented by a human chorus in the rites on Mt. Helicon. The Crotoniates too, then, had female representatives of the Muses; and when Pythagoras tells them 'there is in fact always one and the same chorus of the Muses', he must be urging them to dispense with the human chorus as with the separate worship of this or that Muse, and to set up a cult of a more transcendental kind devoted to all the Muses as the principles of concord and harmony, both in song and social life. It is probable that the temple of the Muses was an innovation. They had probably hitherto been associated with the temple of Apollo (like the Delian

¹ ap. Porph. *V.P.* 4 = F Gr Hist. 566. ² 45 ff.
³ F 131. ⁴ Fr. 35 W. ⁵ See Gruppe, *Gr. Myth.*, pp. 615.

^{*} 50.

maidens). Pythagoras' purging of the temple is likely not to have been confined to Apollo's. Temple prostitution is also common in the worship of Hera; and this temple is also mentioned as now being devoted to Pythagoras' instruction of the women. Pythagoras' reforms are both religious and educational, inasmuch as the religious rite provided the venue for the instruction of the young. The professional female chorus was in one type of early culture the means of instruction and was superseded by the instruction of the *sophos*, deriving possibly from a different cultural stream. At Croton Pythagoras finds a debased form of the professional female chorus, and supplants it with the other method. The various sections of the community, the boys, the young men, the girls and married women, forming choruses and performing their service at the appropriate temple are instructed separately by Pythagoras in their respective duties in the community; and Pythagoras himself receives his commission from the ruling council.

Pythagoras' general activity in the community is one which can hardly have provoked criticism or unpopularity. But he did more. 'Further', Iustinus writes, '300 of the young men, bound to each other by oath, like a brotherhood, lived separately from the rest of the citizens and brought the city under their control.' A fragment quoted from Timaeus seems to have a bearing on this association.¹ 'So when the young men came to him and wished to spend their time with him, he did not immediately consent, but said that the property of people who converse together should be common as well.' Then much later in the book Timaeus says that it was due to the Pythagoreans that it was first said: 'the possessions of friends are held in common'. And we may compare a fuller account of the Timaeus passage in Diogenes Laertius:² "'Pythagoras first said" as Timaeus relates, "that friends' possessions are common and that friendship is equality". And his disciples pooled their possessions. For five years they kept quiet, only listening to the discourses and not seeing Pythagoras until they were approved for membership.'

Apart from these references the Pythagorean society is mentioned in our accounts only in the stories of the movements against it, which begin at the end of the sixth century and reach their climax when the house of Milo was burnt, an event which Fritz rightly dates at the beginning of the second half of the fifth century. This is the period of the expansion of Croton's influence in southern Italy, and the scope of the society may be expected to develop in consequence. Aristoxenus,³ unwilling to ascribe the unpopularity of the society to any serious cause, tells the story of Pythagoras' refusal, when an old man, to take Cylon as a pupil and of Cylon's subsequent jealous enmity against 'Pythagoras and the associates (*hetairous*)' which lasted 'until the last Pythagoreans'. The first attempt was at Croton in Pythagoras' lifetime, and he withdrew to Metapontum. After Pythagoras' death 'the Cylonians' continued the feud; 'but for a certain time the high principles of the Pythagoreans prevailed and the will of the cities themselves to be governed by them in matters of constitution. But at last . . .' the conspiracy which resulted in the conflagration of the house of Milo at Croton occurred, and all the Pythagoreans except Archippus and Lysis perished, with the result that the cities were deprived of their leading men. Aristoxenus clearly knows of an early attack in Pythagoras' lifetime followed by a considerable period in which members of the society managed the affairs of Italian cities, and then of a final attack in which all but two perished.

¹ *F. Gr. Hist.* 566 F 13a.

² *Ibid.* 13b.

³ *Fr.* 18 W

The more balanced account of Timaeus comes to us through Polybius.¹ 'At this juncture in the regions of Italy which were then called Magna Graecia the meeting houses of the Pythagoreans were burnt, and thereafter a widespread political revolution took place, as was natural, when the prominent men in each city met their death so unexpectedly. So it was that the Greek cities in this region were filled with murder and faction and disturbance of every kind.' It is to be noted that Timaeus does not speak of one meeting place only or of attacks on Pythagoreans in one city, but of a general movement against them everywhere. The version of Iustinus which we have already quoted as based on Timaeus does not differ from Polybius. Iustinus' remarks are confined to events at Croton, and he speaks of the death of sixty Pythagoreans in the burning of the meeting house there. This does not exclude the possibility of similar attacks on similar meeting places elsewhere. Minar has shown that Neanthes² has confused the two separate attacks on the Pythagoreans, one in Pythagoras' lifetime and one much later, and produced a single story.³ But this confusion does not conceal the fact that he regarded the attack on the house of Milo as only typical of many other attacks which occurred throughout Magna Graecia. This account attributes the unpopularity of the Pythagoreans to their exclusiveness.

We may, finally, consider the long relation of the political movements at Croton at the time of the Pythagorean influence, which Iamblichus quotes from the life of Pythagoras by Apollonius of Tyana (first century A.D.).⁴ Delatte⁵ and Bertermann⁶ regard this passage as based on Timaeus, but Fritz is more cautious. He calls it 'a confused story' not exclusively based on Timaeus. Minar admits the confusions but is prepared to call it Timaeus. I find that many of the confusions discussed by Minar are illusory, and would accept its evidence with some caution. It is strikingly different in tone from the glowing account of Aristoxenus, but fits remarkably well with the general picture we have hitherto been able to construct, mainly with the help of Timaeus.

'Apollonius says that the jealousy of others attached itself to Pythagoras from earliest years. People had no objection when he discoursed to all comers, but he lost reputation when he spent his time only with his disciples. They did not mind having a foreigner preferred to them, but became angry if they thought that their neighbours were getting the better of them, and they supposed the gathering to be directed at them. Further, since his young pupils came from parents who were superior in reputation and estate, it so happened that as they grew up not only did they take a leading place in their own families but joined together to govern the city. They formed a brotherhood which was indeed large (over 300) but a small minority in the city which was not governed according to their ways and principles. However, while they remained confined to their original territory and Pythagoras was with them, the mode of government which had lasted since the foundation of the city remained in force although the state of affairs was uncomfortable and opportunity was sought for a change. But when they reduced Sybaris and

¹ 2. 39.

² Op. cit., p. 68: Neanthes ap. Porph. *V.P.* 54-57 and *Iamb. V.P.* 252-3 (Nicomachus).

³ The opinion of 'Dicaearchus and the more accurate authorities' is inserted by

Neanthes (see Fritz, op. cit., pp. 6 ff.). There is no ground for supposing that Dicaearchus made the confusion. ⁴ 254-64.

⁵ *Bibl. de la Faculté de Liège*. xxix. 203 ff.

⁶ *Diss. Koenigsberg*. 1914.

⁷ Op. cit., p. 55.

Pythagoras departed, and they¹ arranged for the newly won land not to be divided out in lots as the majority desired, the concealed hatred broke out, and the people sided against them. The opposition was led by those who in blood and friendship were closest to the Pythagoreans. The reason was that most of the Pythagorean habits irritated them as much as they irritated strangers, because they were peculiar, but in particular they thought that these habits were designed to insult themselves.²

Then follows a list of the Pythagorean practices, not mentioning Pythagoras by name, calling him divine, not getting up after sunrise, etc. etc. 'So when these (their kinsmen) started the movement against them, the rest readily joined in and became hostile.' There followed a meeting of the Thousand,³ addressed by Hippasus, Diodorus, and Theages who spoke 'in favour of the whole population having a share in office and in the assembly and the officers being responsible before a court elected from the whole population'. The Pythagorean speakers (Alcimachus, Deinarchus, Meton, and Democedes) urged them not to destroy the ancestral constitution. The result was a victory 'for those who spoke for the people'. In consequence, at a popular assembly duly convened⁴ the Pythagoreans were attacked by Cylon on behalf of the wealthy and Ninon on behalf of the popular party. Cylon's speech is not given. Ninon produces what he claims to be a Pythagorean *hieros logos* in which the members were urged (1) to treat their friends as gods, the rest as beasts, (2) to fight against 'beans', i.e., presumably, the democratic method of election, (3) to aim at tyranny, (4) to use the customs approved by themselves. In short, 'he demonstrated that their pursuit of wisdom was a conspiracy against the people'.⁵ This attack resulted in riots and violence against the Pythagoreans. Democedes 'and the *epheboi*' escaped to a neighbouring city.⁵ New laws are passed by which Democedes is impeached as having attached the *epheboi* to himself 'for a tyranny'; and after a price is set on his head he is killed in battle.

'When the city and the country had suffered many evils (i.e. presumably as a result of civil war) the exiles (i.e. presumably the *epheboi* and any who had joined them) were put on trial (presumably *in absentia*), three cities, Tarentum, Metapontum, and Caulonia being invited to arbitrate. The judges who were sent and received a fee gave a verdict that those responsible should go into exile, as is written in the Crotoniate records. On the strength of winning their case the democrats also sent into exile all who were dissatisfied with

¹ i.e. the Pythagoreans.

² 257.

³ I can see no reason why Minar (p. 56) should insert 'a period of agitation'. Apollonius says *μετὰ ταῦτα*. Once a measure in favour of a popular assembly had been carried there is no reason why the assembly should not have been convened at once.

⁴ Cf. Iustinus: 'quasi coetum clandestinae coniurationis haberent'.

⁵ M. (p. 57) supposes a break here. His arguments are as follows, with my replies: (1) Exiles are spoken of later (262) without explanation. But this is an easy, if not quite accurate, description of the *epheboi*, and there is no need to suppose, what M. says is so unlikely, that the exiles were recalled and

put on trial. (2) The subsequent sections manifestly refer to c. 453. If there is no break, or only a short passage omitted, Iamblichus' whole narrative, which we have heretofore assumed to refer to the times of Pythagoras and Cylon, must in fact have referred in the original source to the later struggle. But this does not take into account the phrase *ἐπιγενομένων δὲ πολλῶν ἐτῶν* at the beginning of 263. (3) 'In section 263 Litates is called the most prominent of the democratic leaders' and he has not been mentioned before. But this statement refers to a time 'after the lapse of many years'. And the descriptive clause 'who was the most prominent of the revolutionaries' suggests that the narrator is aware that he has a new character to introduce.

the (new) régime and sent the families (of the *epheboi*) also into exile, saying that they must not be impious and separate children from parents. Then they annulled debts, and divided up the land.¹ Many years later when Deinarchus' associates had perished in another peril (i.e. presumably the burning of the meeting-houses about 453) and Litates too who was the most eminent among the revolutionaries, a degree of pity and remorse came over them and they wished to bring back those who were left. So they sent for envoys from Achaea and by their good offices became reconciled to the exiles and laid up their sworn covenants at Delphi.²

The reference to the Crotoniate records and to the covenants laid up at Delphi, as well as the balanced and circumstantial nature of the account itself, suggests the method of an historian such as Timaeus. If we accept its general outlines as probably correct we conclude that the Pythagoreans were dominant in Crotoniate life and politics from about 529 to about 509, that is to say in the important period of rehabilitation between the defeat on the Sagras and the victory over Sybaris. After this victory the buoyant Crotoniate popular party rejected the conservatives, and the more active members of the society went into exile. This probably marks the end of any actual Pythagorean rule, although even before the first attack on their power it is hardly likely that this rule consisted in anything more organized than the gradual concentration of all offices into the hands of men who had been Pythagoras' pupils and thus formed a kind of *hetaireia*. Thereafter, in spite of the opposition of the democrats, Deinarchus and his associates probably held office from time to time in Croton, and elsewhere in southern Italy Pythagoreans influenced the local governments. As Aristoxenus observed, 'for a certain period the high principles of the Pythagoreans prevailed and the favour of the cities towards them'. This is the period of Pythagorean as of Crotoniate expansion. Meeting-houses are established in the cities of southern Italy. The Crotoniate Pythagoreans meet significantly in the house of Milo, the general who had commanded the Crotoniate forces in the critical battle of the Traeis. Then begins a planned movement against the Pythagorean 'international', and their meeting places throughout Magna Graecia are burned. The result of this movement, bringing about the death of the leading men in each city, is a period of violence and faction. Ultimately the Achaeans are invited to arbitrate, and when internal peace is restored and the Pythagorean exiles brought back, Sybaris, Caulonia, and Croton adopted the constitution of the Achaean league, and were only forced to give it up by Dionysius in 388. Fritz has suggested plausibly that the league of Sybaris, Caulonia, and Croton may in fact be identical with the alliance between Thurii and Croton which we know to have been made shortly after 444.³ The Achaean arbitration in southern Italy must at any rate have taken place before the Spartans set up an oligarchy there in 417, and probably before the conference of Gela in 424.

If this is the correct historical framework, we may now turn to consider the nature of the Pythagorean companionship and its part in Crotoniate public life. We have seen how at the outset of his career at Croton Pythagoras, at the instigation of the ruling council, carried out a thorough-going reform of the

¹ We may compare Solon the mediator, who did the former but not the latter.

² Cf. Polybius 2. 39. 4 (Timaeus). Ius-

tinus knows of only one attack, the latter, and he speaks of exiles as a result of this.

³ Op. cit., pp. 72 ff.

religious cults in so far as they affected the instruction of the various classes of the younger generation. Pythagoras, in this role, appears as a religious and cultural reformer like Epimenides. And the story of his experiences after he left Croton confirms this picture. Neanthes¹ says that he made for Locri, 'but when the Locrians had word of it, they sent some of their elders to the boundaries of the country who met him and said: "Although we have heard that you are a wise man, Pythagoras, and clever, yet, since we have no complaint against our own institutions we shall endeavour to abide by what we have, and do you go elsewhere taking from us anything of which you may stand in need."' The reforms he had carried out at Croton may be described as a reform of *nomoi* in the sense of institutions rather than a political constitution. As we have just seen, the Pythagoreans, politically, were for the conservation of the ancestral constitution (*patrios politeia*) against democratic change.²

Apollonius³ specifically derives the *hetaireia* or companionship from the teaching activities of Pythagoras. 'It came about when those youths whom Pythagoras had taught grew up and began to be important in their own families as well as jointly to manage the affairs of the city they formed a large *hetaireia*.' Iustinus speaks of 300 *iuvenes* living segregated from the other citizens and bound by a kind of oath 'like a brotherhood'. And as a result of the anti-Pythagorean movement after the annexation of Sybaris, Democedes and the *epheboi* secede from the city. In the twenty years of teaching between 529 and 509 it appears that Pythagoras had established a firm hold on the boys and young men of Croton, and that he had founded for the *neoterioi*, i.e. the men of military age, an institution of common life. The common life consisted in meetings in a *synedrion*, was bound by an oath,⁴ and could be described as a *hetaireia*. *Logoi* were read and discussions took place in which the novices did not share for the first five years. There was a community of possessions. So much we have on sound fourth-century authority. There is further in Iamblichus⁵ a lengthy account of the internal organization of the society. It describes the rigid tests for membership, the three-year probationary period followed by five years of membership though without participation in discussions, community of goods, purificatory rites and initiations preceding admission as *esoterikoi*, those who failed the tests being regarded as 'dead'. There is also mention of the two degrees of membership, the 'listeners' and the 'learners', of which various explanations are given. The provenance and value of this account are altogether uncertain. But it well may have behind it a basis of truth. The references to the two grades of membership *esoterikoi* \times *exoterikoi*, *mathematikoi* \times *akousmatikoi*, *pythagoreioi* \times *pythagoristai*, are too frequent to be ignored, and the features which recall the initiation rite as found elsewhere can hardly be inventions.

The clue to the nature of the whole Pythagorean institution may perhaps be found by reverting to the Salmoxis story in Herodotus. There Salmoxis is described as doing among the Getans what he has learnt from Pythagoras. He founds an *andreion* and teaches the leading men of the country the doctrine of

¹ ap. Porph. *V.P.* 56.

² *Nomoi* is used in the same sense in a passage in D. L. (8. 3) which may, as Minar believes, rest on Dicaearchus: 'laying down *nomoi* for the people of Italy P. gained great fame together with his disciples who to the

number of 300 managed the government very well, so that the city was almost an aristocracy'.

³ ap. Iamb. *V.P.* 254.

⁴ Iustinus 20. 4. 14; Iamb. *V.P.* 260.

⁵ *V.P.* 71 ff.

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the immortality of the soul. If the main part of the Pythagorean institution, the *synedrion* of the 300 young men, is in fact an *andreion* in which Pythagoras acts the role of *sophos* at the regular common meal, then the rest of the Pythagorean activity, at any rate as far as concerns the male part of the community, is no more than the proper function of the *sophos* in teaching the young and preparing them for man's estate. The presence of novices, who do no more than listen, is paralleled by the admission of the young sons of members to the Ionian common meal.¹ The 'common life' reduces itself to days² spent in a *synedrion* culminating in the common meal; and the 'community of goods' to a common sharing in the pooled contributions of the various members. If the statement is true that the society was formed of youths who grew up and became important in their families and in the city, we cannot suppose anything very far-reaching in the way of a common life. They must have lived at home and spent by no means all their time with their *hetairoi*. But as a daily 'lunch-club' under the presidency of a teacher such as Pythagoras, it might clearly have a very great effect on the life of the city. There is perhaps a confirmation of this interpretation of the Pythagorean society as an institution developed from the widespread Greek common meal of the men of military age, in the statement which occurs in the condensed account of Iustinus, that Pythagoras came to Croton after visiting Crete and Sparta 'to acquaint himself with the laws of Minos and Lycurgus which had a great reputation at that time'. One of the most striking features which these two civilizations had in common was the institution of the common meal. It is possible that Pythagoras actually visited Crete and Sparta on his way from Samos to Croton, although there is no other mention of such a visit. It is perhaps more likely that someone thought he ought to have been there in view of the resemblance of the Pythagorean society to the Dorian common meal.

We have supposed that the Pythagorean *synedrion* consisted of young men initiated into adult life under Pythagoras' guidance. In the first place we hear of Pythagoras teaching the boys and young men, the girls and married women. These may well have been the sons and daughters and wives of all those enjoying full citizenship, although it is possible that there was a restriction to the leading families of the city. But the exclusiveness which is constantly charged against the Pythagoreans lay more in the selection of members of the *synedrion*, so that we are probably not to suppose that this was a body comprising all the men of military age. It was a *hetaireia* selected by Pythagoras himself and thus resembled the private companionships we may notice elsewhere attached to leading personalities.³ Such a gathering is in a sense a perversion of the original comprehensive common meal of all the men of military age. The difference between the two types was noted by Xenophon⁴ when he says that Lycurgus at Sparta saw the evils of dining at home and so made the meals public. Xenophon when he speaks of dining at home was probably thinking of the private companionships of Athens. At Athens and elsewhere the common meals provided opportunities for the dissemination of knowledge and the imparting of moral instruction, as well as for political debate. We must suppose that the cultural side was particularly developed by Pythagoras at Croton.

It remains to consider the 'international' organization of the Pythagoreans.

¹ Cf., e.g., Plato *Laches* 179^b.

βιόττες.

² Diodorus (10, fr. 3, 5) describes the inner Pythagorean circle as οἱ καθ' ἡμέραν συμ-

³ Cf., e.g., Hdt. 5. 71.

⁴ Xen. *Lac. Pol.* 5. 2.

The accounts of the attack on their meeting-houses throughout Magna Graecia, which appears to have taken place soon after the middle of the fifth century, reveal a state of affairs in which the institution of the meeting-place of leading men in each city had become widespread. Timaeus appears to have said that all these were burnt in a simultaneous attack and that as a result the cities were deprived of all their leading men and fell into confusion. Aristoxenus, wishing, it seems, to minimize the unpopularity of the Pythagoreans, or out of ignorance, speaks only of the destruction of the Crotoniate meeting-place, the house of Milo, and leaves the reader to infer that all the Pythagoreans from the whole of southern Italy perished there. This picture is unlikely, indeed incredible. The phrase in Plutarch¹ 'the (Pythagorean) societies in each city' suggests that the Pythagoreans of Croton had exported the institution of the meeting-place, not that the few leading men in each city were, as it were, corresponding members of the Crotoniate meeting-place. These non-Crotoniate *synedria* were not subordinate in any way to Croton, nor were they vehicles for Crotoniate power. The influence of Pythagoreanism at Metapontum and Tarentum did not, as a matter of historical fact, carry with it any economic or political ties with Croton. So in modern times the spread of the Rotary lunch clubs may be an indication of a widespread admiration for American business, but have no direct link with the political and economic power of the United States of America.

III

In conclusion an attempt must be made to determine the content of the teaching given by Pythagoras in his general discourses and in the discussions of the *synedrion*.

The four addresses which are given by Iamblichus as delivered by Pythagoras (1) to the youths in the gymnasium (37-44), (2) to the Thousand in the Council (45-50), (3) to the boys in the temple of Apollo (51-53), and (4) to the women in the temple of Hera (54-57), are almost certainly not authentic. They seem to have points of contact with the conservative literature of the fifth century, e.g. the exposition of 'the old education' in Aristophanes' *Clouds*² and with several of the fragments of Antiphon,³ also with Philolaus and Plato. But even if this relationship could be established beyond doubt the addresses are not proved to have been the source of these common ideas. In general they bear the marks of a loosely composed assemblage of suitable material. On the other hand, the 'addresses to all comers' whose effect, we are told, was to restore, through *paideia*, the discipline and morale of the Crotoniate society must have contained material of this general description.⁴ It is, however, hardly profitable to press speculation further.

With regard to the instruction given by Pythagoras to the narrower circle of intimates we are better informed. The earliest testimony, as we have seen, concerns Pythagoras' doctrine of the immortality and transmigration of the soul. Closely bound up with this⁵ is the doctrine attributed to Pythagoras and Empedocles by Sextus Empiricus⁶ of the communion which must exist not only

¹ *De genio Socratis* 13. 583 a: αἱ κατὰ πόλεις ἐταίρειαι.

² 961 ff.

³ e.g. Antiphon DK, B 60 and Iamb. V.P. 51; Ant. DK, B 44 col. 1, 2 and Iamb. V.P. 48; Ant. DK, B 50 and Iamb. V.P. 46.

⁴ See Porphyry's summary of Pythagoras'

secret doctrine in V.P. 19: πρῶτον μὲν ὡς ἀθάνατον εἶναι φησιν τὴν ψυχὴν, εἰτα μεταβάλλουσιν εἰς ἄλλα γένη ζώων, πρὸς δὲ τούτοις ὅτι κατὰ περιόδους τιναὶ τὰ γενόμενα ποτε πάλιν γίνονται, νέον δὲ οὐδὲν ἀπλῶς ἔστι, καὶ ὅτι πάντα τὰ γινόμενα ἐμφυχα ὁμογενῇ δεῖ νομίζειν.

⁵ See above, p. 136. ⁶ *Math.* g. 127.

between all men¹ but between all living creatures. And this doctrine is brought into connexion with the other great Pythagorean subject, mathematics, by Plato in the *Gorgias*:² 'The wise say, Callicles, that heaven and earth and gods and men are held together by communion and friendship, by orderliness, temperance, and justice; and that this is the reason, my friend, why they call the whole of this world by the name of order (*kosmos*), not of disorder or of dissoluteness. Now you, as it seems to me, do not give proper attention to this, for all your cleverness, but have failed to observe the great power of geometrical equality among both gods and men. You hold that self-advantage is what you ought to practise because you neglect geometry.' Eudemos³ said that Pythagoras changed the study of geometry (which had previously had only a practical application) into 'the form of pure education'.⁴ And Aristoxenus⁵ testimony is much the same: 'Pythagoras seems to have honoured the study of numbers to a greater degree than any and to have advanced and developed it from commercial employment, making a numerical representation of everything.' If we may accept the evidence of Eudemos and Aristoxenus we can, then, find an example of the educational use of number in an extract from Philolaus who was himself a Crotoniate.⁶ 'The position with regard to the nature of the physical world and *harmonia* is as follows. The reality of things, which is eternal, and indeed the nature of the physical world itself, admits of divine and not human knowledge, indeed it is only possible for anything to be known to us because the reality of those elements out of which the world-order is composed consists of limiting and unlimited factors. But since the primary elements (*archai*) are neither similar nor of the same kind, it would from the first be impossible for them to be included in a system of order if there was not somehow or other a *harmonia*. Things which are similar and of the same kind have no need of *harmonia*, but it is necessary for things which are dissimilar and not of the same kind nor of the same rank to be bound together by such a *harmonia* if they are going to form part of the world-order.' Philolaus then described the actual nature of the *harmonia*, or numerical relationship of notes in the musical scale, which is a perfect example of number being the reality of a physical thing.⁷ Philolaus began his treatise concerning the nature of the physical world with the sentence:⁸ 'Physical nature has been brought into a harmony in the world-order out of the unlimited and limiting factors; the same is true of the whole world-order and of everything in it.'

The position of number in Philolaus' system is central. It is that which holds together the elements of different rank, kind, and potency in an ordered whole.

¹ This doctrine occurs in the discourse to the youths in Iamblichus (*V.P.* 40).

² 507 e ff.

³ Fr. 84.

⁴ *ἐς σχῆμα παιδείας ἐλευθέρου*.

⁵ Fr. 23 W.

⁶ DK 44 B 6.

⁷ The fragment continues: 'The interval of the octave is a fourth (*syllabe*; 3:4) and a fifth (*di' oxenion*; 2:3); and the fifth is greater than the fourth by a tone (*epogdoon*; 8:9). Now from E¹ (*hypate*) to A (*mese*) is a fourth, and from A¹ to E (*nete*) is a fifth, while from E to B (*trite*, later *paramese*) is a fourth, and from B to E¹ a fifth. The interval between A and B is a tone. The fourth is a relationship of 3:4, the fifth of 2:3, while the whole

octave is a relationship of 1:2. So a *harmonia* consists of five tones and two half tones (*dieseis*), a fifth consists of three tones and a half tone, and a fourth consists of two tones and a half tone.'

The scale may be set out thus:

12	T ¹ E	<i>nete</i>	} 5th	} 4th
	T ¹ D	<i>paramete</i>		
	T ¹ C	<i>trite</i>		
9	T ¹ B	<i>paramese</i>	} 3:2	} 4:3
8	T ¹ A	<i>mese</i>		
	T ¹ G	<i>lichanos</i>		
	T ¹ F	<i>parhypate</i>	} 4th	} 5th
6	T ¹ E ¹	<i>hypate</i>		

⁸ DK B 1.

The world is an infinite range of differences in many categories. To this continuum number is applied as a limiting factor and produces a thing: in the case of the musical scale, a concord, in the case of physical nature the world-order. The terminology used by Philolaus suggests that the city was conceived to be a third sphere for the application of limit to the unlimited. The words 'like', 'unlike', 'of the same kind' (or tribe), 'of the same rank', are all political. The numerical bond is a kind of formula for producing unity in a city as it makes concord in music and a harmonious universe.¹ The exact nature of the numerical relationship conceived by Pythagoras as the uniting principle both of the universe and of the city can only be guessed. Heath² regards the theory of means as having been 'developed very early in Pythagoras' school with reference to the theory of music and arithmetic'. Plato, in the passage in the *Gorgias* quoted above, speaks of the geometric 'equality' (i.e. the proportion, progression, or mean 2:4:8) as 'having great power among gods and men' and suggests that it is this which produces 'friendship and orderliness and temperance and just dealing' and which is the basis of the world-order. The numerical relationships which Philolaus regards as inherent in the musical scale are expressed in what Iamblichus, following Nicomachus, called 'the most perfect proportion' consisting of four terms and called musical,³ an example of which is the proportion $12:9 = 8:6$. The numbers 8 and 9 whose relationship to each other constitutes the musical tone (*epogdoon*) are respectively the harmonic and arithmetic means between 12 and 6, while $12:6$ constitutes the relationship of the first and last notes of the octave. In the *Republic*, which is generally regarded as later than the *Gorgias* and to have been written after Plato had met Archytas on his first visit to Sicily, the unifying principle in the city (and in the individual soul) is no longer the geometric proportion but the musical *symphonia*, 'so we are not wrong in divining a resemblance between temperance (*sophrosyne*) and some kind of harmony. Temperance is not like courage and wisdom, which make the state wise and brave by residing each in one particular part. Temperance works in a different way; it extends throughout the whole gamut of the state, producing a consonance of all its elements from the weakest to the strongest as measured by any standing you like to take—wisdom, bodily strength, numbers, or wealth. So we are entirely justified in identifying with temperance this unanimity or harmonious agreement between the naturally superior and inferior elements on the question which of the two should govern, whether in the state or in the individual'.⁴ Later in the same book the justice of the soul which, as we have seen, is parallel to the justice of the city is described in even more markedly musical terms as a *harmonia*. 'The just man does not allow the several elements in his soul to usurp one another's functions; he is indeed one who sets his house in order, by self-mastery and discipline coming to be at peace with himself, and bringing into tune those three parts like the terms in the proportion of a musical scale, the highest and the lowest notes and the mean between them, with all the intermediate intervals. Only when he has linked these parts together in well tempered harmony and has made himself one man instead of many, will he be ready to go about whatever he may have to do, whether it be making money and satisfying bodily wants, or business

¹ For an example of the way in which a numerical relationship may serve as a bond to preserve the harmony of the universe compare Anaximander's world-picture and the

image of the universe in the myth of Er.

² *Greek Mathematics*, pp. 84–85.

³ See Heath, *op. cit.*, p. 86.

⁴ 4. 431 d ff.

transactions or affairs of state.¹ We should bear in mind when we read these words how in the *Republic* the justice of the state is the justice of the individual writ large.

A fragment of Archytas' work on mathematics,² which is generally regarded as genuine, describes the effect of a *logismos*, or mathematical formula in promoting political harmony: 'a formula once found stops party strife and increases concord. For when the formula is accepted there is no aggression but a state of proportion (*isotes*). A formula brings us agreement in matters of contract. Through a formula accordingly the poor receive from the rich and the rich give to those in need, both confident that through the formula they will enjoy their rights.' Archytas sees society as divided into rich and poor, each of which have their rights which are determined for both by *logismos*. This formula can be illustrated from passages in Archytas' work 'about law and justice':³ 'Law with relation to men's soul and common life is like harmony with relation to hearing and speech. For law educates the soul and holds together man's common life, while harmony gives understanding to hearing and agreement to speech.'⁴ Later he asserts that law must be in conformity with nature, and it is so when it imitates natural justice.⁵ Natural justice is 'that which is proportionate and gives to each his share according to his merit'. Law is in conformity with nature when it gives each his due, as he says: 'Rule is the prerogative of the better, obedience of the worst'. He proceeds to give a detailed account of how this natural justice, which gives to each man his due on an aristocratic hypothesis, is best embodied in constitutional form. The three constitutions, aristocracy, democracy, and oligarchy, are compared to about three progressions, the harmonic, the geometric, and the arithmetic;⁶ and it is shown how the first progression, in which the higher terms are separated from the lower by an increasingly greater proportion of themselves, corresponds to the aristocratic constitution, in which the possessor of 'virtue' enjoys honour, is punished severely, and has a share in the government in a degree increasingly greater as his grade of virtue is higher. Archytas shows that this principle is not recognized in the democratic constitution, and that its reverse is recognized in the oligarchic. We are now in a position to see that the *logismos* of which Archytas spoke is exactly this harmonic progression, which is regarded as the basis of the aristocratic state and as the best expression of the aristocratic principle 'that rule is the prerogative of the better'. This theory sees society as a harmoniously articulated whole brought into a condition of political concord by the exercise of a principle which is firmly based upon 'nature'. It is this theory which Plato takes over in the *Republic*, where much of Pythagorean practice is also reflected.

The theory of Archytas, and of Plato in the *Republic*, provides an excellent illustration of the employment of number in the way Eudemus said Pythagoras employed geometry, as a liberal education, that is to say, as a basis for a theory

¹ 443 d. ² *περί μαθημάτων* DK 47 B 3.

³ *περί νόμον και δικαιοσύνης*: the fragments occur in Stobaeus (4. 1. 135-8, 5. 61). These in ch. 1 occur immediately before the fragment from the *περί μαθημάτων*. Early critics, e.g. Hartenstein (1833) and Beckmann (1844), defended the political fragments against the charge of containing Platonic and Aristotelian matter. The

Hebraisms which Gruppe saw in them, e.g. the metaphor of a shepherd to describe a ruler, are plainly illusory. I can see no reason why the political fragments should not be classed with the mathematical ones as genuine.

⁴ 135.

⁵ 136.

⁶ Harmonic: 3, 4, 6, 12; Geometric, 1, 2, 4, 8; Arithmetic 1, 2, 3, 4.

of human society. But there is no reason to use it as more than an illustration. Archytas is credited with the 'invention' of the harmonic progression¹, and the *Republic* was written after Plato had met Archytas. In the *Gorgias*, which was probably written before that meeting, he speaks of the geometric 'equality'; and it is geometry that Pythagoras made into a liberal education. If any particular theory is to be attributed to the early Pythagorean society it must be the one Plato gives in the *Gorgias*. But from Archytas we can at least gain a valuable insight into the way in which a numerical formula could be applied to politics. Pythagoras' essential preoccupation is with man and society. He scans nature's book not as an end in itself but to provide lessons for man and, above all, for man in association with his fellow men. The unifying principle of the world, once grasped, will supply a pattern on which human society can build its harmony. The Pythagorean revelation was a revelation of *dike*, of society ordered by principles which claimed recognition as being part of the natural order. As such it stands in the tradition of Greek didactic poetry. What made his teaching activity unique was his creation, by the adaptation of an existing social custom, of the institution through which these ideas could have a powerful influence in southern Italy and Sicily.

¹ See Heath, *op. cit.*, pp. 85, *Manual*, p. 51.

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NOTES ON THE SCHOLIA TO ARISTOPHANES, *KNIGHTS*

(References are to lines of the play and lines of the appropriate columns in Dübner.)

1. *Misplaced scholia*

48. 43 ἡ ἀπό—44 γένεια belongs to 497 κάλλαια; the displacement is apparently due to a confusion of the syllables αι-καλλ and καλλ-αι.
 291. 23 ὑποτέμνεται—fin. belongs to 316 (so Rogers, and M has the schol. in both places).
 297. 2 ἐμὰ—ἐπιχειρήματα (cf. 299. 10) belongs to 299.
 313. 47 προαρπάζει [οὖν]¹—50 διαβάλλει belongs to 258 ff. (where the text reads ὑπευθύνους σκοπῶν!)
 317. 7 καττύματα κτλ. belongs to 315.
 320 belongs to 882.
 355. 9 νῦν δέ—10 λουδορθεῖν belongs to 772 or a similar passage.
 355. 10 πρὸς τὸ ῥηθὲν—12 Ἀθηναίων belongs to 358.
 527. 50 ff. belongs to 533 ἀλλὰ—534.
 608. 14 ἀποδέχεται—15 μόνον belongs to 92–93.
 1106. 3 ἐκάλουν—4 ἰχθυῖδιον belongs to 1097 Γλάνιδος. (M has the correct lemma.)
 1225. 31 ἔπαιξε—32 εἰρηκῶς perhaps belongs to 989 (unless Σ read the Doric κῆδωρησάμαν).

2. *Variants not mentioned in Coulon's apparatus*

- 27 (actually on 26). 48 ἄλλως—50 αὐτομολήσωμεν gave the whole of 26, including ἦν, to Demosthenes (so Zacher).
 100. 14 ὀνειδισμῶν καὶ λουδοριῶν read κῶνειδιῶν = καὶ + ὀνειδιῶν.
 100. 15 ἀπὸ τοῦ οἴνου καὶ τῆς μέθης (a separate note from the preceding) read καὶ—οἰνοιδίων, apparently thought to be a diminutive of οἶνος.
 262. 17 τῇ ἀγκύλῃ καταβαλὼν read ἀγκυλίσας (so Bentley).
 274. (272.15) the gloss δουλοῖς (ΕΓ³) should imply the reading καταστρέφει.
 277. init. read μέντοι σε νικᾷ in 276.
 297. 54 πλεονεκτεῖν . . . | ἐπιορκῶν refers to 298, which it gives to the sausage-seller (cf. ΣΜ (quoted by Coulon), in which we should read <οἱ μὲν> διαμροῦσιν).
 327. 45 οὗτος—51 καρπούμενον and 53 καὶ οἱ μὲν—54 Μιλήσιον read ὁ δ' Ἰππόδαμος (so Kuster), unless they understood ὀφθαλμός to govern Ἰπποδάμου, as suggested by a note in ΕΓ²Ald.
 327. 51 λυπεῖται—53 πόλιν and 54 Κλέωνος . . . ἦν (which should be transposed with Ribbeck to read immediately after πόλιν) read ὁ δ' Ἰπποδάμου, i.e. Archeptolemus.
 327. 1 Ἰππόδαμος—2 Ἰππόδαμος read ὁ δ' Ἰππόδαμος λείπεται θυνώμενος (λείπεται should be read for λείβεται in the schol.).

¹ Particles in square brackets have been inserted by an interpolator attempting to join two originally separate scholia.

327. 2 ὡς [οὖν]—5 διαβάλλει read ὁ δ' 'Ἱπποδάμου λείπεται θινώμενος (i.e. ὁ δ' ἥττων ἐστι τοῦ 'Ἱπποδάμου).¹
- 367 Σ read οἶον for οἶον.
386. 19 στροβεὺς . . . κναφικόν read στροβεῖ (from στροβεύς) for the imperative στροβέι. The following sentence (20 τοῦτο κτλ.) seems to be a muddled attempt to reconcile the two variants.
393. 44 φησὶν [οὖν] κτλ. took ἤγαγε δήσας together, removing the comma after ἤγαγεν, and read ἀφείναι for ἀφαίνει.
- 407 init. —3 μειράκια read παιδοπίπην (Casaubon).
- 414 init.—37 ἀποβλήματα read ἀπὸ μαγδαλίας (so lemm. in EΓM).
- 434 init.—30 ἀλλαντοπώλης appears to give the line to Cleon. (So at Σ *Lys.* 556 some texts are said to give some words spoken by an interruptor to one of the competitors in the Agon.)
434. 37 τί—44 πόνος gives the line to a third character, not either of the competitors.
434. 45 ἄλλως κτλ. gives the line to the sausage-seller.
- 438 gives the line to the sausage-seller.
- 439 gives 441 to the sausage-seller.
- 532 if Σ did not read λέκτρων, he seems to have imagined he did.
616. 50 τροχαῖκόν τρίμετρον ἀκατάληκτον (referring to 616) may have read νῦν ἄρ' αἰνίον γε πᾶσαν ἐπολολύξαι (om. ἐστίν).
1278. 20 Ἀρίγνωτος—22 εἰδέναι and 1279. 28 οἱ δὲ κτλ. seem to have read our text, but to have misconstrued it, taking Ἀρίγνωτον as the antecedent of ὅστις. It seems possible that the identification of Arignotus as the citharoedus son of Automenes (mentioned, without giving his name, at *Wasps* 1278) rests solely on this misconstruction of *Eg.* 1278–9. The identification is found also at *Athen.* 5. 220 b.

3. Conjectures

7. 8 προσκρούων]? προσκυνῶν (προσκρούων would denote a hostile clash, the wrong sense here).
11. 32 [τοῦ Κλέωνος]. τῶν τοῦ Κλ. κακῶν makes nonsense: τοῦ Κλέωνος seems to be an adscript to τῶν κακῶν. The word order varies in the MSS.: τοῦ Κλ. τῶν κακῶν Γ, τῶν κακῶν τοῦ Κλ. Θ.
13. 37 πάλιν <ἐρωτῶν> ἀπεκρίνατο.
17. 53 ἀντὶ τοῦ . . . παρὰ τὸ] παρὰ τῷ . . . ἀντὶ τοῦ.
20. 20 read φορτικῆς, ὡς ὁ βαυκισμός: οἱ δὲ μέλος.
46. 31, 37 καὶ αἰσθόμενος] καταισθόμενος preceded by a comma.
51. 6 οὕτως <Ἀττικοὶ> τό.
55. 23 Ἀθηναῖος <ἐρωτῶν> τί βούλονται.
84. 21–23 perhaps ὁ καταναυμαχήσας . . . εἰθ' ὕστερον should be bracketed.
84. 3 (p. 37) μετὰ] κατά.
89. 29 ἀληθές <λέγεις> (cf. Σ *Plut.* 123).
107. 43 παρὰ τὸ <παραμένειν, τουτέστιν> ἐμμένειν καὶ μὴ <ἀφ>εστάναι (αἰσθάνεσθαι M).
- 116 init. <ὡς> δύο . . . Κλέωνι, [ὡς] φυλάσσοντος δὲ <ὡς before φυλάσσοντος is an addition by Musurus>.
132. 37 ἐλέγετο. No, he *was* a προβατοπώλης, so Blaydes read ἐγένετο. But

¹ 327. 6 ὁ 'Ἱππ. ἡ ὁ Ἀρχ. refers to 328 ἀνὴρ, as is shown by signs of reference in VΓ^a.

- perhaps we should rather read *προβατοκάπηλος* for *προβατοπώλης*, cf. 765. 39, Hsch. s.v. *προβατοπώλης*, Phot. s.v. *προβατοκάπηλος*, Plut. *Per.* 24.
137. 46 *Ἀθηναίων* *Ἀθηνῶν* (ποταμὸς ἐν Ἀθήναις M).
189. 15 (the schol. refers to 190). ? *παρομοίως* εἶπε καὶ (αὐτὸς) κακὰ κακῶς. (Θ corrupts *παρόμοια* to *παροιμία* at 793. 17.)
230. 19 transpose ὑπ' αὐτῶν to read before *κωμωδουμένοις*.
237. 37 *χείρας*] *χείλος*.
254. 2 ? καὶ <ἄλλαχού> τὸν *Εὐκράτην*.
259. 39 *ἐπήνεγκε* τὸ ἀπο<συνάξεις> *πέζων*.
271. 3 read *τῇ πανουργίᾳ*. λέγει ὅτι (so V, except that it has no punct.) ἐὰν τῇ π. (ἐὰν ἐν τῇ M) *νικήσῃ*.
279. 32 ἄλλως. <παρὰ> τὰ λεγόμενα.
282. 49 ἀπόρρητα] a slip for *ζωμεύματα*.
291. 25 f. read *ὅταν γὰρ ὑποτέμνηται δέρμα κτλ.* (On this schol. see also § 1.)
- 317 init. read *εἰς ὑποδήματα* [τοῖς] αὐτοῖς κακῶς τὰς βύρσας τέμνων.
350. 51 *ἐξηπάτησας*] ? *ἐξήρθης*.
361. 48 *ἰχθύος* <λάβρον Θ>, ἀφ' οὗ.
370. 45 μᾶλλον <τῶν βύρσεων ἢ> τῶν *μαγείρων*.
372. 54 *περιαιρούμενα*] ? *περιαιρέματα*, cf. 770. 12.
381. 28 f. *εἰ χαλαζῆ ἐκεῖ*] *εἰ χάλαζαν ἔχει*.
411. 29 *ποιήσας*] *πονήσας* (cf. 392. 36).
414. 40 The quotation from Homer must include the whole of κ 216–17, as the relevant part is 216–17 *σαίνωσ'*, omitted by our MSS. So at 1056. 25 the quotation omits the relevant part: G. Hermann read [*ψεῦδος*] (a gloss on οὐ κατὰ κόσμον) <καὶ κε γυνὴ φέροι ἄχθος, ἐπεὶ κεν ἀνὴρ ἀναθείη, | ἀλλ' οὐκ ἂν μαχέσαιο>. At Σ Pind. *Pyth.* 4. 82 the quotation must include Ψ 144–6.
431. 7 καὶ <ἀνθρωπίνης δυνάμεως> *μείζονα*, cf. 434. 41.
432. 16 read *τοντέστι τὸ σκεῦος* (so M) ὃ κατέθετο [τῶν ἀλλάντων].
433. 25 read *ἵνα δόξῃ μὴ φιλονεικεῖν*.
436. 51 *πλείων*] ? *σφοδρός*, cf. ΣR *Ran.* 1220. (*πλείων* is plainly corrupt and M omits it.)
- 437 after 11 *αὐτόν* and 12 *πνεῖν* we must supply *καικίας* (or *κακίας*).
437. 17 *οὗτος* . . . ἔλκει should be transposed to read after 14 *τινές*.
438. 25 *γενέσθαι*] *γενέσθαι* (cf. Thuc. 2. 70. 1).
449. 49 οὐ <οὐ> πάντως (οὐ VEM, οὐ ΓΘ).
- 465 punctuate after 41 *Ἀργεῖοις*, not after 42 *ἀπέχθειαν*.
498. 36 f. ? bracket *κατὰ τὴν δευτερεύουσαν* and *κομμάτιον* . . . *παραβάσεως*. Heliodorus does not seem to explain the sections of the parabasis, cf. Σ *Ach.* 626, *Peace* 729. Before *ἐπτάμετρον* (*ἐπτάμετρον δέ ἐστι recte ΓΘ*) a note on 503–6 has been lost, beginning *τὴν δέ*.
508. 24 οἱ <χορευταὶ> πρὸς τὴν ὀρχήστραν.
526. 21 ? οἱ γὰρ λάβρως ῥέοντες ποταμοὶ <ἡχοῦσι> καὶ (cf. 527. 42).
527. init. ἀπλῶν. (so ΓΘ), ἀντὶ τοῦ δι' ἀπλῆς φράσεως.
542. 35 μὴ πρὶν <ἐρέτην γενέσθαι, χρὴ> ἐθέλειν vel sim.
546. 1 *ἐπαράτην*] ? *ἐπαίξε* παρὰ τὸ ἐρέτην.
574. 48 delete *πρὸ τοῦ πολέμου* (gloss on τῶν πρότερον).
589. 54 delete *καὶ τραγικοί*. This interpolation occasioned the Triclinian interpolations bracketed by Dübner (as being omitted by V: they are found only in Ald.). The scholium is in fact concerned only with the comic chorus. See also C.Q. N.S. v (1955), 44.

606. 2 delete *καί* and read *ἡ τῶν Μήδων . . . ἐκφέρει* after 53 (p. 55) *χόρτου*.
 631. 24 *ἐξ ἧς*] *ἐξῆς*.
 645. 20 delete *ἄγαν* (gloss on *σφόδρα*) and punctuate after *ἰχθύων*.
 675. 48 transpose *τουτέστι . . . φραγμός* to read after 46 *τις ὦν*. Before *τις ὦν* read *δρυόφρακτος* with *ΕΓ³*. *τις ὦν* is used with an etymology, cf. e.g. *Σ* Plut. 237, Theocr. i. 47a, vii. 40, Hsch. s.v. *πέλλαι*.
 697. 12 The quotation of the text of *Eq.* in the scholium shows that the scholium is an interpolation from a lexicon (cf. Irenaeus ap. *E.M.* 696. 2 ff.). There is a similar interpolation at *Σ Eq.* 1185, betrayed by the words (1185. 35) *Ἀρ. ἐν τοῖς Ἰππεύσιν εἶπεν*.
 756. 43 *τὸ ἔθιμον, διπλῇ <καὶ δίστιχος>*.
 781. 13 *οὕτω*] ? *οὕπω*.
 834. 23 *οὐδὲν <οὐκ> ἀντιλέγοντος*.
 845. 17 f. ? read *ἐπὶ στόμα <στόμιον ἐπιτιθέναι>, ἐπέχειν τῶν κατ' ἐμοῦ λόγων καὶ διαβολῶν*.
 911 metr. (J. W. White, *V.G.C.*, p. 406) read *τὸ δὲ τελευταῖον [τὸ ἔνατον] τρίμετρον*. *τὸ ἔνατον* is an interpolation by someone who read *τὰ ἐξῆς* as *τὰ ἔξ*, and should probably be deleted rather than corrected.
 919. 27 *μαγεῖρω*] -*ος* (922. 41 -*ος* (correctly) *V²ΕΓΓ²*, -*ω* Ald., -*ως* Θ).
 954. 34 *ὀλίγον . . .* 35 *παρεγκλίνειν* should read after 33 *ὀξύτόνως*. 35 *οὐ τὸ ὄνομα* is a separate gloss on *δημοῦ*.
 954. 49 *ἔψεται*] *παρατίθεται*: only at the end of the operation are the leaves removed, cf. Poll. 6. 57. 49 *στρεφόμενον δὲ κτλ.* describes the same process as 47 *εἶτα ἐξαιρεῖται κτλ.* and must be a fragment of a different note.
 1013. 10 *λεγόμενος*] *δεδόμενος*, cf. *Σ Av.* 978.
 1040. 23 f. *μετέστησαν . . . Σαλαμίνα* should be transposed to read after 28 *τὰς ναῦς λέγειν*.
 1094. 42 read *<κατασπένδεν δὲ χεῖν>*. *χεῖσθαι δὲ λέγεται οὐ μόνον τὰ ὑγρά ἀλλὰ καὶ τὰ στερεὰ κτλ.* (*τὰ ὑγρά κτλ.* are in all MSS. but Θ).
 1279. 33 *ὅστις <οὐκ> οἶδε*.
 1298. 6 *τῶν*] *καί*.
 1344. 51 ? *ἀναρρίπτειν <ταῖς χερσὶ>* cf. Hsch. Bachm. Bk. s.v. *ἀνορταλίζειν*.

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SOME PASSAGES IN VALERIUS FLACCUS

(Quotations are from the Teubner text of O. Kramer)

1. 58-61 talibus hortatur iuuenem, propiorque iubenti
conticuit, certus Scythico concurrere ponto
Cyaneas, tantoque silet possessa dracone
uellera . . .

I CONSIDER first line 58, though its interpretation cannot be separated from that of the ensuing lines. The editors put a comma after *iuuenem* and must therefore intend *propiorque iubenti* to be taken with *conticuit*. It seems more natural, however, to take it with what precedes. The obvious function of *propior* in such a case is to qualify or amplify an idea already stated, as in Stat. *Ach.* 2. 94-95:

tamen ille modeste
incohat, ambiguus paulum propiorque coacto.

The only difference is that in the present passage, instead of a preceding adjective or participle, we have *talibus*; the effect is the same. 'He urges on the young man in such terms or rather more like one issuing a command.' *Propiorque iubenti*, though grammatically conjoined with *talibus*, is in sense corrective of the idea contained in *hortatur*. On this interpretation *-que* is in fact tantamount to *-ue*—for which usage, and its converse, see Langen's notes on 1. 117 and 7. 25.

If therefore we retain a punctuation mark after *conticuit*, we need to emend *hortatur* to *hortatus* (as Burman and Bury do), or rather to accept the suggestion offered to us by the *ortatus* of M. But the further question now arises: What is the proper reading and punctuation in line 59? For, if it were possible to take *conticuit* with what follows, we could put a full stop at *iubenti* and leave *hortatur* unaltered, merely deleting the comma after *iuuenem*. This, however, is not a feasible solution to the problem. The crux in line 59 is the word *certus*, which is the reading of the later manuscripts (*certis*, the reading of V, gives no sense at all). If it is retained, the meaning must be: 'though knowing for certain that the Cyanean rocks clash in the Scythian sea'. But it is manifest that *Scythico concurrere ponto Cyaneas* and *tanto . . . possessa dracone uellera* are co-ordinate; and as *certus* could only govern the first clause and not the second, it cannot stand. Langen rightly observes: '*certus*, quod in duobus codicibus deterioribus reperitur, receperunt Thilo et Schenkl, sed offendit sententia inaequaliter expressa, cum de utroque periculo certus sit Pelias, de utroque sileat.'

Of emendations suggested for *certus*, Bachrens's *certas*, adopted by Giarratano, does not seem particularly appropriate. Loehbach's *cautis*, adopted by Langen and others, is possible; but it is not necessary to provide a noun for *Cyaneas*, which is frequently used in a substantival way. I suggest, therefore, as an alternative *cautus*—to be construed with *silet*. This is appropriate to the context. Pelias commends to Jason the enterprise of recovering the fleece. He does not conceal from him that there are dangers involved (*tantis . . . periculis* in line 57); but these are the dangers of war and voyaging in unknown waters, which a brave man might reasonably be encouraged and expected to face. What Pelias

does conceal from Jason are what might be called the exceptional or abnormal dangers—the Cyanean rocks and the monstrous dragon which guards the fleece. For even a brave man might quail in face of these apparently insurmountable obstacles; and indeed it is only by divine intervention and magical aid that Jason does surmount them. Valerius could very aptly say that Pelias, having exhorted and almost commanded Jason to fetch the fleece, stopped at that point and, as a matter of prudence, said nothing about the Cyanean rocks and the dragon (cf. line 39). *Cautus* might easily, owing to its position, be misconstrued as governing *concurrere* and, as this yields no sense, altered to *certus*.

The text, as emended and repunctuated, would then read:

talibus hortatus iuuenem propiorque iubenti
conticuit; cautus Scythico concurrere ponto
Cyaneas tantoque silet possessa dracone
uellera . . .

Compare for the use of *cautus* Hor. *Carm.* 2. 10. 2–3 *dum procellas cautus horrescis*. *Cautus* could alternatively, though I think less well, be taken with *conticuit*.

The only other suggestion which deserves mention is that of putting a stop at *iubenti* (retaining *hortatur* of course) and construing *conticuit* with what follows: *conticuit cautis* (or *certas*) *Scythico concurrere ponto*, etc. This is the solution adopted by Giarratano, who reads *certas*. The objections to this are: (i) that *contice(sc)o* is not found in classical Latin with the accusative and infinitive (though it may be noted that Valerius uses it, somewhat abnormally, with the accusative, at 3. 302); (ii) that it would be otiose in conjunction with *silet*; and (iii) that the change of tense from *conticuit* to *silet*, which is right and proper if the passage is construed in the manner I have suggested, becomes unnecessary and objectionable.

2. 316–22

tunc etiam uates Phoebo dilecta Polyxo—
non patriam, non certa genus, sed maxima †taetae

Proteaque ambiguum Phariis se fingit ab antris
huc rexisse uias iunctis super aequora phocis;
saepe imis se condit aquis cunctataque paulum
surgit ut auditas referens in gurgite uoces—
'portum demus' ait . . .

'Locus lacunosus et misere corruptus' comments Langen, and adds pessimistically 'de cuius emendatione desperandum'. In 317 V has *maxima taeta* (caete C); in 318 V offers us the defective *phariise ab antris*, C *pharii se patris ab antris*. Kramer, as can be seen, postulates a lacuna of at least a line. I think there is a lacuna, though I do not think it begins and ends exactly where Kramer supposes. The older editors were mostly content to leave the passage as hopelessly corrupt. Those who have attempted to restore it have done so not by supposing any considerable lacuna, but by emending the end of line 317 and supplying a verb (or verbal phrase) to fill the gap existing in V in line 318. Mozley, for example, following Burman, has:

te, maxima Tethy,
Proteaque ambiguum Phariis effatur ab antris, etc.

Suggestions of this type mend the metre and produce a piece of Latin which is

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construable. But the sense remains peculiar. It is odd to say that Polyxo was uncertain about her origin and parentage, but said that Tethys (or Ceto) and Proteus had come to Lemnos from Egypt drawn by a team of seals. What she must be doing is claiming that Tethys (or whoever it is) and Proteus were her parents. This is the whole point of lines 320-1. Polyxo is a prophetess (as we see from Stat. *Theb.* 5. 90 ff. as well as from Valerius); and she is here made to bolster up her claim by arguing that she is of divine parentage and has special communion with the deities of the sea. There seems every reason for supposing that this point ought to be made explicitly in the poem and not left to be inferred. Baehrens saw the force of this argument and therefore emended to:

non patriam, non certa genus, sed te, anxia Ceto,
Proteaque ambiguum Phariis fert rumor ab antris
huc uexisse suam, etc.

I suggest that Valerius wrote something such as this:

te, maxima Tethy,
Proteaque ambiguum fari solet esse parentes
prouectamque patris Phariis se finit ab antris
huc rexisse uias

The eye of a scribe might easily wander from *fari s-* to *Phariis* and thus cause him to leave out two half lines.

I think that *Tethy* is the right reading in 317. Hyginus *Fab.* pref. 6 says that Polyxo was a daughter of Oceanus and Tethys and there was therefore presumably some tradition to the effect that Tethys was her mother. Moreover *maxima* is applied to Tethys elsewhere (e.g. Stat. *Theb.* 3. 34; *Ach.* 1. 222). We need not be unduly perturbed by the fact that Polyxo is here made to claim Proteus and not Oceanus for her father. She is, after all, only inventing a genealogy for herself. There were two traditions about Proteus—one that he was a sea-god and one that he was a king of Egypt—and so he would make a suitable father for one who wished to claim both marine and terrestrial connexions. He was also a prophet—*uates* is his regular title¹—and therefore a suitable father for a prophetess. (Virgil's *Deiphobe Glauci* (*Aen.* 6. 36) is a parallel case.) Moreover it is possible, as Schenkl pointed out, that Valerius in his account of Polyxo had in mind Eidothea in Homer, *Od.* 4. 365-6:

Πρωτεύς ἰφθίμου θυγάτηρ ἁλίου γέροντος,
Εἰδοθέη.²

On this supposition the subject of *huc rexisse uias*, etc., is Polyxo. There is of course no objection to the plural *uias* of the journeyings of a single person. Valerius commonly uses it thus (3. 501; 4. 350; 7. 223).

The advantages of the emendation I have suggested are twofold: (i) that it gives an intelligible connexion of thought to the passage as a whole; (ii) that it offers a plausible explanation of the manner in which the readings exhibited by the manuscripts may have arisen. None of the other suggestions seems to me to do either of these things.

¹ Virg. *Georg.* 4. 387; Ov. *Met.* 11. 249; (cf. the whole ensuing passage in Silius).
Luc. 10. 510; Stat. *Ach.* 1. 136; Sil. 7. 421

² Cf. also *Ciris* 391-6.

2. 359-60

... unoque dei Pangaea sub ictu
Gargarae et maesti steterunt formidine luci.

Maesti, which the older editors did not question and which Kramer retains, is quite certainly a corruption. This is not because of any inherent impossibility in the phrase *maesti steterunt formidine luci* (the collocation of *maestus* with *formido* and similar words is quite acceptable; cf., for example, 5. 188 and 5. 352); it is because the context plainly requires a reference to particular *luci* and not just a vague reference to *luci* in general.

Baehrens was therefore quite justified in principle when he proposed *Moesi*, which has been accepted by all subsequent editors except Kramer. I suggest, however, that what Valerius wrote was not *Moesi*, but *Mysi*. There are three reasons for preferring the latter suggestion; none is by itself decisive, but together I think they are:

- (i) *Gargara* naturally suggests *Mysia*, because it was the highest mountain in the range of Ida, which is situated in that region. Compare for the association Virg. *Georg.* 1. 102-3

 nullo tantum se Mysia cultu
iactat et ipsa suas mirantur Gargara messis
(where some manuscripts have Moesia for Mysia)

- (ii) Valerius himself adverts to the forested mountains of *Mysia* (the κολῶνας Μύσαι of Apoll. Rhod. 1. 1114-15) at 3. 484
quosque dabat densa trabe Mysia montes

- (iii) *Mysus* is a well-attested adjective (e.g. Prop. 2. 1. 63 *Mysus* . . . iuuenis; Ov. *Pont.* 2. 2. 26 *Myso* . . . duci); whereas, though *Moesus* is a perfectly possible adjectival form, along with *Moesicus*, *Moesiacus*, and even *Moesiaticus*, I have not been able to discover any certain instances of it (Valerius uses the word as a noun at 6. 162 = a Moesian).

It is quite likely that *Mysi* would become *Moesi* before being corrupted to *maesti* (cf. for the confusion Virg. loc. cit.; Luc. 3. 203; Juv. 9. 143). It should be remembered of course that the Mysians were believed by the ancients to have come to Asia Minor from Moesia, and that the words *Mysia* and *Moesia* (and their cognates) are merely dialectal variants. Greek writers habitually call Moesia *Μυσία* (sometimes for clarity *Μυσία ἡ ἐν Εὐρώπῃ*). In Latin the distinction is normally observed, though it appears sometimes to be neglected. I have not been able to discover examples of *Moesia* used for *Mysia*; but *Mysia* is sometimes used for *Moesia*. So, according to at least some manuscripts—for what they are worth in such a matter—Ovid, *Pont.* 4. 9. 77 *Mysas gentes*; Amm. Marc. 27. 4. 12 *dein Mysia, ubi Marcianopolis est*. Compare *C.I.L.* v. 7160 6-7 *MYS. SUPERIOR* (*C.I.L.* ii. 484. 3 is extremely dubious).

3. 670-1

†et ego et† quocumque uoces, †qua tegmina† ferro
plura metam.

(et ego et V, et egomet M, ast ego et S, ast egomet
CT; qua tegmina V, sequar, agmina Jacobs)

Line 670 has been gravely corrupted and no restoration of it can do more than achieve a measure of probability. Two assertions can be made about it

with reasonable confidence: (i) that a main verb, probably in the future indicative, must be generated out of the corrupt words; and (ii) that *tegmina* conceals the word *agmina*, which is clearly required as the object of *metam*. I had considered the possibility that *qua te-* represented the letters of *atque* misplaced and that the line originally read something like: *en adero quocumque uoces atque agmina ferro*. Compare Virg. *Ecl.* 3. 49 *ueniam quocumque uocaris*. But *en*, when used with a future indicative, seems to require a following pronoun, as in Hor. *Sat.* 1.

1. 15-16:

si quis deus 'en ego' dicat
'iam faciam quod uultis';

or Virg. *Aen.* 6. 781-2:

en huius, nate, auspiciis illa incluta Roma
imperium terris, animos aequabit Olympo.

It seems therefore better to accept the ingenious suggestion of Jacobs (adopted by Mozley) that we should read *en ego te quocumque uocas sequar, agmina ferro*. For this one might compare, amongst other expressions of this type, Calp. *Ecl.* 1. 13:

quo me cumque uocas, sequor, Ornyte.

The other difficulty presented by these lines is the word *plura*. Neither 'more' nor 'several' seems appropriate. Mozley adopts Bury's *dura*, taking *agmina ferro dura* as 'steel-clad warriors'. *Ferro*, however, is most naturally taken with *metam*; indeed I should suppose that Valerius had in mind Virgil's:

proxima quaeque metit gladio latumque per agmen
ardens limitem agit ferro. (*Aen.* 10. 513-14.)

The most plausible suggestion is that *plura* is the corruption of a participle, as Baehrens thought. He proposed *rupta*, which was adopted by Langen. I suggest that Valerius wrote *pulsa*, just as at 3. 221-2 he wrote *iam pulsa sibi cessisse Pelasgum agmina*.

4. 174-6

haec ubi non ulla iuuenes formidine moti
accipiunt, uidet et dura sic pergere mente,
terga sequi properosque iubet coniungere gressus.

(uidet et Schenkl, dolet et V, dolor et duras insurgere mentes C)

Dymas has been telling the Argonauts how his friend Otreus was killed by Amycus and expressing the hope that Lycus, Otreus' brother, will not in his turn make the foolish attempt of trying conclusions with such a ruthless and invincible foe.

Dolet et will obviously not do as it makes no sense as an extension of the subordinate clause introduced by *ubi*. Hence Schenkl's emendation, adopted by the most recent editors. The idea suggested by *dolet*, however, seems apt to the context. Dymas is distressed that, in spite of his warning, the Argonauts seem unable to appreciate how formidable Amycus really is. It is possible, therefore, and I should have thought more likely, that the end rather than the beginning of the line has suffered corruption in V. Such was evidently the opinion of Baehrens, who retained *dolet* and emended *dura sic* to *durent si*. What I have to propose is simply a slight extension and improvement of this proposal. *Et* needs to be altered to *at*, for what follows (i.e. Dymas' invitation to the

Argonauts to follow him) points a contrast with his previous reluctance; and *mentes* is, I think, slightly preferable to *mente*. The passage will then read:

haec ubi non ulla iuuenes formidine moti
accipiunt, dolet; at, durent si pergere mentes,
terga sequi properosque iubet coniungere gressus.

(When the youths receive his story quite unperturbed, he is distressed; but, since they are boldly resolved to carry on, he bids them follow him and join their hastening steps to his.)

Si here = *siquidem*, as often. The use of *duro* with the infinitive in the sense of 'be bold to' is unusual, but can be justified by Sil. 11. 74-75 (*heu Capua portantes talia dicta Romuleis durastis, ait, succedere muris?*) and Petron. 41. 2 (*duraui interrogare illum interpretem meum*).

The absolute use of *doleo* is common enough (e.g. Ov. *Met.* 3. 480). Valerius has it at 7. 160-1:

illa nimis sed dura manet conuersaque in iram
et furias dolet.

Failure to see that *dolet* was here used absolutely might easily have led to the remaining part of the line being altered to constitute a clause dependent on it.

7. 228-30

patriam inde uocato
qua redit itque dies, nec nos, o nata, malignus
cluserit hoc uno semper sub frigore mensis

(nos onata V, diis nata C; malignis VC, malignus cod. regius, cod. Burmanni)

Venus, disguised as Circe, is urging Medea to leave the dark and cold land of Colchis for the warmth and sunshine of Greece.

The crux of the matter is in the word *mensis*. What the context seems to require is a word meaning something like 'climate'. Such a sense of *mensis* seems to be unknown to the Latin dictionaries. It could be developed from such expressions as Virgil's *caeli menses et sidera* (*Georg.* 1. 335), but the only passage of Latin that I have been able to discover in which this sense is clearly present is Man. 5. 40-45, the whole of which is worth quoting:

illa (i.e. the constellation Argo) quisquis erit terris oriente creatus
rektor erit puppis clauoque immobilis haerens
mutabit pelago terras uentisque sequetur
fortunam totumque uolet transnare profundum
classibus atque alios menses altumque uidere
Phasin et in cautes Tiphyn superare trementem.

Housman, following Bentley, compares Val. Fl. 6. 324 *alium hic miser aspicias annum*; and adds Luc. 9. 872 *alios soles*. He does not, however, refer to the passage at present under discussion. It is of some interest that the sentence in Manilius refers to the climate of Colchis, as our passage does; and it could be argued that Valerius is introducing a reminiscence of the earlier poet, in which case the text as printed above could be retained. But the Manilius passage does not completely convince me that *mensis* is acceptable here. *Alios menses* can be more readily related to the primary meaning of *mensis*¹ than can *malignus*

¹ Cf. Turnebus's note on Manilius, loc. cit., quoted by Housman.

mensis. Moreover *mensis* comes under suspicion on account of the uncertainty of the reading in line 229.

If emendation is, as I am inclined to suspect, necessary, I should propose to read:

nec nos sol, nata, malignus
cluserit hoc uno semper sub frigore mersas.

If the 's' at the beginning of *sol* were lost after the 's' of *nos*, the change to *o nata* might easily occur. *Malignus* would then find itself without a noun; and it would be provided with one by the substitution of *mensis* for *mersas*. A later hand might then seek to improve upon such sense as remained by altering *o nata malignus* to *dis nata malignis*. And so might arise the actual readings with which the manuscripts present us.

Malignus, in the sense 'niggardly', goes very appropriately with a noun denoting light (and, in the present case, warmth as well). This sense, beginning with Virgil's *sub luce maligna* (*Aen.* 6. 270) is found subsequently not only in verse (e.g. Luc. 9. 73-74 *qui fulget luce maligna ignis*), but even in prose (Sen. *Ep.* 65. 17 *malignum et precarium lumen*). It is applied by Pliny specifically to the light characteristic of the Arctic and Antarctic zones: *maligna ac pruina tantum albicans lux* (*Nat. Hist.* 2. 172). It is worth remembering in this connexion that the Roman poets can represent Colchis as an Arctic region, e.g. Luc. 2. 585-6:

hinc me victorem gelidas ad Phasidos undas
Arctos habet.

For the use of *mersus* compare another passage in Pliny which describes a similar region as *pars mundi damnata a rerum natura et densa mersa caligine* (*Nat. Hist.* 4. 88); and Virg. *Aen.* 6. 267 *pandere res alta terra et caligine mersas* (with *luce maligna* just above). Note also the application of *sol iniquus* to the torrid zone (Virg. *Aen.* 7. 227; Luc. 7. 866-7).

Sub with the ablative could be attached to *mersas*, as, for example, in Tib. 2. 5. 79-80:

sed tu iam mitis, Apollo,
prodigia indomitis merge sub aequoribus.

It may be noted, however, that *sub* with the ablative is a perfectly possible construction with *cl(a)udo*. So Man. 2. 953-4:

hic etiam ipse dies moritur, tellusque per orbem
subripit et noctis captum sub carcere claudit;

and Sil. 5. 277: *clausum sub casside vulnus*. As far as construction is concerned, therefore, the manuscript reading in line 230 is quite defensible; and the grounds on which emendation seems necessary are (i) the peculiar sense of *mensis*, and (ii) the variety of readings in line 229.

In conclusion some reference must be made to the emendation of this passage proposed by Summers and accepted by Mozley, viz.:

nec nos, o nata, maligna
cluseris hoc uno semper sub frigore mente.

This suggestion seems to me objectionable on stylistic grounds, for the collocation of the two ablatives is ugly. Moreover the sense is not particularly good, for Medea has said no more than that she is glad to have Circe back after such a long sojourn abroad; and in view of line 231 *nos* is much better taken as 'us' than as 'me'.

7. 543-7

contra uenit Arcas Echion

dicta ferens, iam Circaeis Mauortis in agris
stare uirum: daret aeripedes in proelia tauros.et 'uocor en ultro' dixit, 'spesque addidit alas.
uos mihi nunc primum in flammis inuertite, tauri', etc.

(et uocor V, en uocor M; aula V, ausa C, alas Ph. Wagner)

Echion is informing Aeetes that Jason is waiting in the field of Mars to undertake the task of yoking the fire-breathing bulls. Aeetes had been hoping vainly that Jason would abandon the enterprise.

There are two points of difficulty in line 546. The first is the abruptness of the change of subject in *dixit*. Although it is softened slightly by the fact that Aeetes is the subject of *daret*, it is unquestionably awkward; and Kramer consequently supposes a lacuna of a line. It is simpler, however, to reject the unnecessary *et* or *en* at the beginning of the line and replace it by *rex*. For a similar correction, presupposing loss of the initial letter of the line (in this case without further corruption), compare Housman's *rex tolletque* for *extolletque* at Luc. 8. 345.

The other problem is that of the correct reading at the end of the line. The fundamental question here is whether the expression beginning with *spes* is part of the speech of Aeetes or a comment of the poet's. If it is a comment of the poet's, the *spes* must be that of Aeetes; but this is strange, for we have just been told that Aeetes' hope was that Jason would leave Colchis without making any attempt to gain the fleece. Hence Langen adopts, though without much conviction, Koch's '*spes concidit illa*'. But it is equally likely that the expression beginning with *spes* is part of the speech of Aeetes; in which case it becomes worth while to consider whether Wagner's, or indeed any, emendation is necessary. (In any event, Virgil's *pedibus timor addidit alas* (Aen. 8. 224), cited by Kramer, gives no support to the emendation, for the presence of *pedibus* makes all the difference.)

The *spes* on this alternative supposition must be that of Jason, and this is not intolerably difficult, for though he is not mentioned specifically in the first half of the line, it is his challenge that is referred to. The meaning can then be: 'hope (i.e. the hope which has sprung up in Jason's heart) has given rise to a bold enterprise'; or perhaps even: 'hope has intensified his (i.e. Jason's) boldness'. *Addere* not uncommonly means 'to generate or produce' (a new feature in a situation), e.g. in Sall. Cat. 58. 1 *uerba uirtutem non addere*, and in the expression *addere animum* or *animos*. Sometimes the idea of intensifying or accelerating an existing state of affairs is also present. Compare, for example, Ovid's *dolor addidit iram* (Met. 12. 532). I am disposed therefore to think that this part of the line needs no emendation and to suggest reading:

rex 'uocor en ultro' dixit 'spesque addidit ausa . . .'

For the association of *spes* and *ausa* compare 5. 659-61:

si iuuenem . . .

iuuimus et magnis aliquam spem mouimus ausis.

C. L. HOWARD

THE PENTATONIC TUNING OF THE GREEK LYRE: A THEORY EXAMINED¹

I. It has commonly been assumed that, on ancient Greek instruments of the lyre-type (lyre, barbitos, cithara), when a string had been tuned to a certain note, that note and that note only could be played, until the string was retuned; thus, that a separate string was required for each note of a given scale. This (which may be called the orthodox) view involves certain difficulties. The canonical number of strings was seven, and seven-stringed lyres and citharas continue to be represented in art throughout the classical period. But, with one note to each string, a seven-stringed lyre could not even play a complete diatonic octave. Towards the end of the fifth century the number of strings on the cithara (or on some citharas) was raised to eleven and then to twelve. With one note to each string, it may be doubted whether, even so, citharodes could play either a note-for-note accompaniment to each and every melody then in use or the free and florid accompaniments implied by Plato (*Laus* 812 d). To meet such difficulties, it has been suggested that a technique of 'stopping' was employed, i.e. that the string-length was shortened transiently by means of finger-pressure so as to produce a note of higher pitch without the slow process of retuning.² If this could be done, a seven-stringed lyre could play more than seven, a twelve-stringed cithara more than twelve, notes. The *accordatura* of the instrument might well, in that case, present gaps in the basic scale—gaps which were filled in performance by stopping.

Later in this article (Section VII) I shall suggest that what we know of the construction of these instruments and the mode of playing upon them makes it doubtful that such a technique could have been employed to any considerable extent. It is not, however, my purpose to go into this highly complicated question as a whole, still less to disprove the employment, to any degree or in any circumstances, of stopping or of 'gapped' *accordatura*. I have a more limited object, which is to examine a particular theory of the tuning of the Greek lyre that has gained some currency, namely that the lyre (barbitos, cithara) had a standard pentatonic *accordatura*—or rather two alternative and closely related pentatonic *accordatures*. The theory was first advanced by C. Sachs in 1924 in an article on the instrumental notation;³ and he has since upheld it in a number of publications. Its main features can be summarized as follows.

The diatonic octave was obtained on six strings, not eight. These six strings were tuned to a pentatonic scale without semitones: either E G A B D E or

¹ This article was read in draft by Mrs. M. I. Henderson, to whom I owe a number of valuable suggestions.

² Arist. *Probl.* 19. 12 refers to *διάληψις*, by which is clearly meant the application of pressure to the central point of a string: the note sounded on either side of this point will be an octave higher than the note of the undivided string. It is not, however, clear whether the writer envisages a practical technique or an experiment upon the monochord. Athenaeus, 14. 638 a (on Lysander of

Sikyon) may possibly be referring to such a technique, but the interpretation is doubtful. For a method other than stopping of raising the pitch of a string without retuning see p. 184.

³ 'Die griechische Instrumentalnotenschrift' (*Zeitschrift f. Musikwissenschaft*, vi [1924], 289–301). Cf. 'Die griechische Gesangsnotenschrift' (*ibid.* vii [1925], 1–5); *History of Musical Instruments*, pp. 131–5; *Rise of Music in the Ancient World*, pp. 203–5.

FGACDF.¹ In the E octave the notes F and C had no string of their own, but were obtained, respectively, from the E and B strings by stopping. The Fs in the F octave were obtained by retuning the E strings, the C by retuning the B string, and, when this had been done, the Es and the B could no longer be obtained on open strings. Stopping was also employed to provide whatever 'accidentals' were required in rendering the various *harmoniai* or *tonoi*² in all three genera (enharmonic, chromatic, and diatonic). Given the basic E or F *accordatura*, no retuning of strings was necessary in order to pass from one scale to another. Detailed illustration will be forthcoming when we examine Sachs's interpretation of the instrumental notation. For it is an essential support of his view that this notation, with its triads of symbols, was a 'tablature': of the three forms in each triad, the basic form indicated the open string, the first modification (Liegezeichen) stopping with the index finger, the second modification (Wendezeichen) stopping with the middle finger. The symbols signified not pitches, but strings and fingering.

Sachs's theory is mentioned with favour by Abert,³ Vetter,⁴ and Düring.⁵ It forms the basis of O. Gombosi's interesting speculations in his *Tonarten und Stimmungen der antiken Musik*; and Gombosi's views have doubtless reached a large audience of musicologists through the chapter on ancient Greek music in G. Reese's *Music in the Middle Ages*. So far as I am aware, the pentatonic hypothesis has not been subjected to a critical examination. There is a case against it; and this case should not be allowed to go by default, with the result that a dubious theory becomes an accepted doctrine. I am accordingly setting out in this paper a number of arguments which seem to tell, in varying degrees, against the hypothesis. If its claims can stand up to examination, it certainly represents an important forward step in our knowledge of Greek music. But it is surely better to confess ignorance than to build an elaborate structure upon a foundation which is (as I fear) unsound.

The principal evidence adduced in favour of the hypothesis—by which I mean the ground common to Sachs and Gombosi—comes from the instrumental notation, which must, therefore, be the principal object of examination. It is examined in Section IV below. But I will first discuss briefly some other evidence, archaeological and literary, with which the hypothesis has been supported and will then refer to a number of passages in ancient authors which seem to tell strongly against it.

II. Lyre-type instruments with four strings only (in a few cases, three or five)

¹ For the sake of simplicity, I employ only capital letters for the notes of the scale. As we shall be dealing with the central octave only, no confusion, I trust, arises. I read the scales upwards, since I think most people find this easier to follow. In doing so I imply nothing about the theoretical structure of the scales or the tendencies of Greek melody.

² For the purposes of this article it is perhaps unnecessary to draw the distinction between *ἀρμονία* and *τόνος* which some contexts demand. Only that portion of each *τόνος* will come under consideration which lies in the central range of the voice.

³ Pauly-Wissowa, xiii. ii, col. 2485 (s.v. Lyra). The paragraph in question has all the appearance of a hasty afterthought: Quintilian 12. 10. 68 (ii. 273 Teubner) is quoted as Aristid. Quintil. ii. 273; by Plutarch *de mens.* 16 a reference to the *de musica* (on Phrynis) is intended. The wrong chapter reference and 'Aristides' both derive from Sachs's article.

⁴ P.-W. xvi. i, col. 851 (s.v. Musik).

⁵ *Ptolemaios und Porphyrios über die Musik*, p. 219 n. 5; 'Studies in Musical Terminology in Fifth Century Literature' (*Eranos* xliii [1945], 176-97, esp. 192 ff.).

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are represented on vases and other monuments of the geometric period.¹ It is argued that these instruments must have provided, and by means of stopping (or a similar device) could have provided, an octave scale. Two assumptions lie behind this argument: (i) that the accompanying instrument necessarily played every note of the vocal melody, and (ii) that the melodies of this period had the range of an octave. Neither assumption can be regarded as certain. It cannot be too strongly emphasized that, while we know little enough about the fifth century, we know virtually nothing about the scales employed in archaic Greece. It may, however, be significant that some of our scanty evidence concerns scales of limited range.² If the technique of stopping was in fact practicable on these early four-stringed instruments, it may of course have been employed so as to give them a greater capacity than four notes. But their existence does not go very far to prove that the technique was employed—much less that their successors with more strings were confined to standard pentatonic *accordature*.

Literary evidence which bears directly upon the tuning of the lyre is almost wholly lacking.³ A couple of passages in ancient authors have been held to imply a pentatonic *accordatura*.

(i) In a fragment of the late-fifth-century comic poet Pherecrates quoted in Plutarch *de musica*, ch. 30 (§§ 302 ff. W.-R.), Phrynis is said to have corrupted music 'with twelve *harmoniai* on five strings' (ἐν πέντε χορδαῖς δώδεχ' ἁρμονίας ἔχων). This is taken to mean that, as on the hypothesis, he was able to play twelve (or a large number of?) *harmoniai* on a cithara pentatonically tuned. The text has generally been regarded as unsound and has been much emended. There are difficulties in taking it as it stands. The school of citharodes to which Phrynis belonged is associated particularly with the addition of strings to the instrument, which is referred to above and below in connexion with Melanippides and Timotheus. The number of strings required, on the hypothesis, to play a multiplicity of *harmoniai* is six and not five (the term pentatonic being misleading in this connexion). The interpretation, with or without emendation, of this difficult passage must, therefore, be the conclusion and not the starting-point of an argument.⁴

¹ L. Deubner, 'Die viersaitige Leier' (*Athen. Mitteilungen*, liv [1929], 194-200).

² Notably the evidence of Plutarch, *mus.* ch. 11 (§§ 104 ff. W.-R.) and ch. 19 (§§ 172 ff.), on the *spondeion*. Cf. *Class. Quart.* xxii. 2 (1928), 83 ff. The 'defective' *spondeion* with its compass of a minor sixth argues for the genuineness of the 'defective' scales in Aristides Quintilianus, I, ch. 9 (13. 12 ff. Jahn): the Ionian with its compass of a seventh, the *synntonon* Lydian with its compass of a minor sixth. Other grounds for believing the scales of Aristides to be genuinely ancient are given by J. F. Mountford in *Class. Quart.* xvii (1923), 126 ff.

³ Book 19 of the Aristotelian *Problems* gives a disappointing yield. There is the difficulty whether, in any particular case, χορδή means 'string' or (as it admittedly came to mean) 'note'. In 18, which refers to singing, it must mean 'note'. Only 20 and 36 refer directly to tuning. In 20 χορδὰς (89.

5 Jan) must mean 'strings', but only *mese* and *lichanos* are specified. In 12 Monro restored συμφῆλαι and φῆλαι with great plausibility, in which case the reference is to the playing of strings, but the only strings mentioned are *mese*, *paramese* (or *paranete*), *nete* and *hypate*. All these strings existed on the pentatonic hypothesis. The other relevant *Problems* can all be interpreted in terms of notes of the scale rather than strings of the lyre.

⁴ One might suppose that Phrynis, to demonstrate his virtuosity, took a five-stringed lyre and played on it in a multiplicity of *harmoniai*. But this would be a special and unsupported hypothesis designed solely to explain this one debatable text. Sachs and Düring (article in *Eranos*—see p. 170, n. 5) suggest that he used a mechanical device of his own invention (στροβίλος) for this purpose. But this interpretation of the text is highly speculative.

(ii) In Quintilian, *instit. orat.* 12. 10. 68, the words *cum in cithara quinque constituerunt sonos* might refer to the initial tuning of five (again, not six) strings, but the language which follows suggests that the *quinque soni* are the 'standing-notes' of tetrachords, the intervals between which are filled with a variety of notes.¹ It must be confessed that Quintilian (a late writer for our purposes) has not made his meaning very clear.

III. Upon these passages the hypothesis, if proved on other grounds, might conceivably throw light, but they are in themselves negligible support for it.² To set against them there is a number of passages in ancient authors which seem to imply that the lyre and cithara needed to be tuned specifically for the various *harmoniai*. They do not prove that stopping and 'gapped' *accordature* were never used in any circumstances. But the hypothesis supposes, not only that certain notes in the series were obtained by stopping, but that a common tuning—or either of two common tunings—enabled the player to play in all the required *harmoniai* or *tonoi*. For instance, in the E-tuning, there is no essential technical difference between Dorian, Hypodorian, and Phrygian: all the open strings are used and two notes are obtained by stopping.³ The passages are as follows:

(i) Aristophanes, *Knights* 987 ff.⁴ Cleon, said his schoolfellows, would only tune his lyre to the Dorian *harmonia* and would learn no other.

(ii) Plato, *Laches* 188 d.⁵ Here again the writer speaks of tuning the lyre—or rather the whole life—to a particular *harmonia*. On any normal interpretation, of ἀρμόττεσθαι λύραν, it is implied that the different *harmoniai* (Dorian, Ionian, Phrygian, Lydian) required different tunings. To accommodate these passages to the hypothesis we should have to suppose that the expression referred not to tuning, but to *playing* (with different 'Griffe') in these *harmoniai*. But there are other passages in Plato⁶ where ἀρμόττεσθαι λύραν (or ἀρμονίαν) is used of tuning; and, while none of them implies a diversity of tunings, they make it very hard to take the expressions in the *Knights* and in the *Laches* in any other sense than that of tuning the lyre to a specific *harmonia*.

(iii) Plato, *Republic* 399 c–c, contrasts with the lyre and cithara other instruments which are described as πολύχορδα καὶ πολυαρμονία (including the aulos, described as πολυχорδόστατον).⁷ The point must surely be that the aulos, as by

¹ Cf. R. G. Austin's note (following Mountford) in his edition of Quintilian 12. The principle seems right, though the details are obscure.

² Gombosei (*Tonarten*, pp. 20 f.) also invokes Plutarch, *mus. ch.* 39 (§ 406 W.-R.). It by no means follows, however, that, because *tritai* and *parhypatai* were flattened 'in addition to' or 'in the direction of' (the two possible senses of *προσ-* in *προσανιέντες*) the standing-notes, they were produced from the same strings as the latter. Indeed, on the hypothesis, they were 'pien-tones' (*v. infra*) and their intonation was thus completely under the control of the player.

³ Dorian: E f G A B c D E. Hypodorian: E f# G A B c D E. Phrygian: E f# G A B c# D E. (Lower-case letters are used for notes obtained by stopping.)

⁴ φασὶ γὰρ αὐτὸν οἱ παῖδες οἱ ξυνεφοίτων | τὴν δωριστὴν μόνην ἂν ἀρμόττεσθαι θαμὰ τὴν λύραν, | ἄλλην δ' οὐκ ἐθέλειν μαθεῖν.

⁵ ἀρμονίαν καλλίστην ἡρμοσμένους οὐ λύραν ... ἀλλὰ ... τὸν βίον ... ἀτεχνῶς δωριστὴν ἄλλ' οὐκ ἰαστί, οἶμαι δὲ οὐδὲ Φρυγιστὴν οὐδὲ Λυδιστὴν, ἀλλ' ἥπερ μόνη Ἑλληνικὴ ἐστὶν ἀρμονία.

⁶ *Rep.* 349 c (μουσικὸς ἀνὴρ ἀρμολύμενος λύραν ... ἐν τῇ ἐπιτάσει καὶ ἀνάσει τῶν χορδῶν); *Rep.* 591 d; *Phaed.* 85 c ff.; *Theaet.* 144 c.

⁷ In Stesichorus (25 b Diehl = Simonides 46 Bergck) πολύχορδος of the aulos is more probably a conscious metaphor than a 'faded' use. So too in this Platonic context, though in this case it might be a refurbishing of a use already faded.

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then developed, and stringed instruments with many strings could play in a variety of *harmoniai* without the necessity of retuning and that, to the disgust of Plato, modulation was facilitated thereby; the lyre and the cithara, on the other hand, had sufficient strings only for a single *harmonia* and needed to be retuned before playing in another.¹ But, according to the hypothesis, all that was needed to change from one *harmonia* to another was a different stopping of strings which had been tuned once and for all. Thus the lyre and cithara were in effect *πολυαρμόνια*, like the rest.

(iv) Athenaeus (*Deipnosophists* 14. 637 b-f) quotes from a certain Artemon an account of a musical instrument of short-lived popularity invented by a certain Pythagoras of Zacynthus. It was called *τρίπους* or 'tripod'; and the essential feature of its construction was that each of the three spaces between the legs accommodated a set of strings. The spaces were assigned to the three *harmoniai*: Dorian, Phrygian, and Lydian. When the player wished to change from one to another, he revolved the contraption, which rested on a pivot, with his foot. The process, remarks the writer, was so rapid that anyone who did not see what was happening, but judged by ear alone, thought he was listening to three citharas differently tuned.² There is no good reason to doubt the story, which implies—certainly for the date of Pythagoras and possibly for the date of Artemon³—that, normally, citharas were specifically tuned to the Dorian, Phrygian, and Lydian *harmoniai* and delay was involved in changing from one to another on the same instrument. But, on the hypothesis, no such delay would be involved: the citharode could pass rapidly from *harmonia* to *harmonia* by changing his fingering.

The evidence of these passages⁴ relates, as so little of our evidence does, to the classical period and makes it difficult, if not impossible, to believe that the standardized pentatonic *accordatura* prevailed during that period. It could hardly be argued, however, that the inception of the instrumental notation, if not its completion, was later than the fourth century; and the interpretation of this notation which provides the primary evidence for the hypothesis is intimately bound up with the view that stopping was used extensively to produce a multiplicity of *harmoniai* from a common tuning. If it proves anything, it proves that; in which case it may be thought to prove too much. We must now turn to the notation and consider whether in fact it proves anything at all about the *accordatura* of the lyre.

IV. Thanks to Alypius, we can read the notes of the pieces of ancient Greek music which have come down to us. But we are bound to recognize certain anomalies in the notations which he records. The same symbol has different values in different *tonoi*; the same note is represented in different *tonoi* by different symbols. It is not surprising that a number of theories has been

¹ Plato here disregards the increase in the number of strings on the cithara, which may have been subsequent to the dramatic date of the *Republic*, and which in any case fell short of the *πολυχορδία* of, for example, the *magadis*. Essentially the same point is made by Aristides Quintilianus, 2. 18 (65. 19 ff. Jahn), where he contrasts stringed and wind instruments: the former are *ἀμετάβολα*, the latter *ἐς τὸ μεταβάλλειν ἐξ εὐθέως ἐπιτῆθαι*, i.e. 'suited to rapid modulation'.

² *τριῶν κιθάρων . . . διαφόρως ἡρμοσμένων*.

³ Pythagoras of Zacynthus is mentioned as a theorist by Aristoxenus, 2. 36 (127. 24 Macran). I know of no other evidence by which he can be dated. Artemon, of Cassandreia, is probably of the second or first century B.C.

⁴ Sachs quotes (iii) and (iv) without, apparently, perceiving their bearing upon his own theory.

advanced to account for these phenomena or that the notations have been invoked in support of theories of the Greek scale-system. At one point or another, however, the interpretation tends to break down and special hypotheses have to be introduced to make the notations fit the theories. A theory which really did explain every feature of the notations, without recourse to such special hypotheses, would indeed be welcome.

It is commonly agreed that of the two notations, instrumental and vocal, the instrumental is the older. It is characterized by the use of triads or groups of three related symbols: e.g. $\text{F} \cup \text{F}$, $\text{C} \cup \text{C}$. The lowest in pitch of the three symbols is the basic letter-form;¹ the second is the same form laid on its back; the third is the same form reversed.² It will be convenient to refer to them as 'first position (FP)', 'second position (SP)', and 'third position (TP)' symbols, respectively. It has generally been assumed that each triad was intended to represent a *pyncnon*, i.e. a close-set group of notes in the enharmonic or chromatic genus. The essential feature of the Sachs-Gombosi hypothesis is that the symbols relate not to notes but to strings: FP indicates that the open string was to be used; SP that the pitch of the string should be raised by means of pressure with the middle/index finger; TP that its pitch should be raised by means of pressure with the index/middle finger. Sachs and Gombosi differ as to the fingering;³ in what follows I shall speak in terms of Gombosi's view that SP indicates the middle finger and TP the index finger. It should be observed that while the index-finger was used in some cases, on this hypothesis, to raise the note of the open string by the interval of a tone (Ganztongriff), it was used in other cases to raise it by a semitone only (Halbtongriff): the distinction between the two modified symbols is one of fingering and not of pitch.

The FP symbols provide a continuous diatonic series.⁴ This happens to be the series of notes required in the diatonic form of the Hypolydian *tonos* (which is thus conveniently regarded as the 'natural key'). But, while FP symbols are used, taking the central octave of that *tonos*, for E G A B D E, the notes F and C are indicated by means of the SP forms of the E and B triads. Why were the FP forms of the F and C triads not used? The question is eminently legitimate. The answer given is that these notes were not produced on F and C strings, which were not in fact available to be played, but by means of middle finger pressure on the E and B strings, respectively, this being indicated by the symbol used. If it is asked why, when there were no strings for F and C, triads of symbols were provided based on F and C, the answer given is that there was an alternative tuning, also pentatonic, in which the E string was tuned to F, the B string to C (in which case they were not of course available for playing E and B). The *accordatura* was then: F G A C D F. The F and C triads were necessary for noting those *tonoi* which employed this 'high' tuning. According to Gombosi, a C string was actually added as the seventh string; it was not, however, used (or not normally used)⁵ as an addition to the B string, but as an alternative to it. Let us see how the system works out.⁶

¹ No convincing theory of the origin of these forms has yet been advanced.

² There are some exceptions, which, though they may have a bearing on the history of the notation, need not be discussed here.

³ Cf. Gombosi, *Tonarten*, p. 21, n. 1.

⁴ The notation of this series will be found in Grove's *Dictionary of Music and Musicians*,

5th edition, iii. 779; of all the triads in Gombosi, *Tonarten*, p. 20. There are complete tables in Gevaert, *Histoire et théorie de la musique de l'antiquité*, i. 408-15, and in other comprehensive works.

⁵ See, however, p. 176.

⁶ I have been much helped here by Gombosi's full and lucid exposition.

It is convenient to begin with the set of *tonoi* in which the central octave stretches from F to F.¹ These are the Hypodorian, Hypophrygian, Hypolydian, Dorian, Phrygian, Lydian, Hyperdorian (formerly Mixolydian); the Hyperphrygian and Hyperlydian duplicate the Hypodorian and Hypophrygian at the octave.² In these *tonoi* the enharmonic and chromatic pycna are (with a few exceptions) noted with a complete triad, i.e. the *barypycnon* is played on an open string, the *mesopycnon* and *oxyphycnon*³ are obtained, respectively, by pressure with the middle and the index fingers, but the notes so obtained vary according to the genus, i.e. in the enharmonic the index finger raises the pitch of the string by a semitone, in the chromatic by a tone.⁴ In certain cases, where the *barypycnon* is not obtainable on an open string (i.e. Hyperdorian *meson*, Dorian and Hyperdorian *synemmenon*), we find a scheme of notation which prevails in the second category of *tonoi* and which will be discussed below. Apart from these anomalous tetrachords, no difficulty arises at first sight, though on reflection one may ask a question. In the chromatic, the note of the *oxyphycnon* is in many cases identical with that of an open string: e.g. in the Phrygian chromatic, *lichanos meson* is an A, and A is the note of an available open string. Why did the player have to employ this presumably difficult and possibly unsatisfactory technique of obtaining A by pressure on the G string rather than use the A string which was available?⁵ It seems perverse and unpractical, but, if we take the notation as a tablature (and as telling the truth), that must be what the player did.

The diatonic *parhyptoeidē*⁶ were (with the same exceptions) noted with a SP symbol, indicating middle finger pressure on the open string. The diatonic *lichanoeidē*—and certain of the 'standing-notes'—also involve in many cases the raising of a string by a semitone. In these cases, however, the symbol employed is not SP, but TP. For example, in the Dorian *tonos* diatonic *lichanos meson* is A \flat , obtained *ex hypothesi* by pressure on the G string.⁷ Why in this case was the TP symbol used, whereas the SP symbol was used for the A \flat which is diatonic (or chromatic) *parhyptate meson* in the Phrygian? Why is Dorian *mesē* noted C and Lydian *parhyptate meson* C , though both are obtained *ex hypothesi* by raising

¹ i.e. the central range of pitch, containing the notes *hypatē meson* to *nete diezeugmenon* according to the thetic nomenclature.

² In the Hypolydian and Lydian, though the central octave extends from F to F, the F's are, according to the hypothesis, obtained from strings tuned to E. The Hypolydian, which requires a B, is in fact tuned (*ex hypothesi*): E G A B D E.

³ Convenient terms of Greek theory (*βαρύπυκνον*, *μεσόπυκνον*, *δξύπυκνον*) for indicating the lowest, the middle, and the highest notes of an enharmonic or chromatic pycnon.

⁴ e.g. the tetrachord *meson* of the Phrygian *tonos* in the chromatic genus:

Strings:



Notation: F C C C
(FP) (SP) (TP) (FP)

⁵ It is not open to adherents of the hypothesis to argue that the notation was different because the two notes were not in fact identical: for them the notation is concerned with strings and fingering, not with subtleties of intonation.

⁶ The terms *parhyptoeidē* (*παρῃπτοειδῆ*) and *lichanoeidē* (*λιχανοειδῆ*) are convenient for indicating the notes which come, respectively, second and third in the standard tetrachord (reading upward). The former includes both *parhyptatai* and *tritai*, the latter both *lichanoi* and *paranetai*.

⁷ e.g. the tetrachord *meson* of the Dorian *tonos* in the diatonic genus:

Strings: F F G A



Notation: F F G A
(FP) (SP) (TP) (TP)

the same string by a semitone? The practice is formulated by Gombosi (*Tonarten* 23): 'wenn unter dem alterierten Ton ein ebenfalls alterierter Ton liegt, wird 1 [index finger pressure] genommen, wenn aber leere Saite, dann 2 [middle finger pressure]'. This assumption is clearly necessary, if the scheme is to work out and the appearances be preserved: its *technical* necessity is by no means obvious.¹

Special difficulties arise (and are discussed by Gombosi) in connexion with the tetrachord *synemmenon* in four of the *tonoi*. (It is assumed, perhaps rightly, that the interplay of the tetrachords *diezeugmenon* and *synemmenon* goes back to an early stage.)

(a) In the Hypolydian diatonic the note C, and in the Lydian diatonic the note F, are required both as *trite diezeugmenon* and as *paranete synemmenon*. They are differently noted in the two tetrachords: *trite diezeugmenon* with SP symbols of the B and E triads, respectively; *paranete synemmenon* with the symbols of the open C and F strings, which were, however, *ex hypothesi* not available. Two explanations are open to adherents of the hypothesis: either *paranete synemmenon* was really obtained, like *trite diezeugmenon*, from the B (E) string and the notation was conventional (and misleading); or two strings were actually employed. But the latter explanation is not open except in the case of the Hypolydian and to those who (with Gombosi) admit the C string along with the B string. If the players were prepared to use both of the alternative strings in this case, is it not surprising that they did not make freer use of this convenience? Why not, for instance, play *trite diezeugmenon* also on the open C string? There are surely limits to the power of tradition and convention when confronted with practical utility. And can we really believe that the same note was played on two different strings for purely theoretical reasons?

(b) The difficulty in the Dorian and Hyperdorian (Mixolydian) is somewhat similar. *Trite synemmenon* is noted in the Dorian on the open B string, in the Hyperdorian on the open E string. But these strings were *ex hypothesi* not available.² Here again Gombosi is inclined to believe that in the Dorian the B string was actually employed along with the C string; and again one may express surprise that such a licence, if employed at all, was employed so sparingly. The alternative is to suppose that, although noted with symbols proper to the B and E strings, these notes were actually obtained from the A and D strings by means of a *Ganztongriff*. A notational convention? But a convention thoroughly destructive of the system. (We shall meet with its like again.)

There are thus certain difficulties in applying the hypothesis to the group of *tonoi* so far considered (h and h *tonoi*). We must now turn to the other group (# *tonoi*), in which the central octave stretches from E to E. These are the Hypoionian, Hypoaeolian, Ionian, Aeolian, Hyperionian and Hyperaeolian (which duplicates the Hypoionian at the octave).³

It is convenient to begin by considering the chromatic genus. The character-

¹ It is not adequate to say that the middle finger (Sachs: index finger) was already engaged in stopping the string of lower pitch. This, if true, was only true when the two notes occurred consecutively in the melody.

² The open C string is used in the Dorian, the open F string in the Hyperdorian, for *paramese*.

³ According to Gombosi the Hypolydian and Lydian had a double function: the former served both as a 'high' Hypolydian and as a 'low' Dorian, the latter both as a 'high' Lydian and as a 'low' Mixolydian. There is much to be said for this view, which is perhaps confirmed by the recently published Oslo papyrus (cf. *Symb. Osl.* xxxi [1955], 54-55).

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istic notation of the pycna can be illustrated from the tetrachord *meson* of the Aeolian *tonos*, where the pycnon is noted $\Gamma \text{ C } \text{C}$, i.e. the *mesopycnon* is given a FP symbol, the *barypycnon* and *oxyphycnon* TP symbols.¹ In terms of the hypothesis, the *mesopycnon* is played on an open string, the *oxyphycnon* and *barypycnon* by means of index finger pressure on that string and on the next lowest string, respectively.² Here it may be asked why the *oxyphycnon* is played with pressure by the index finger and not the middle finger. According to the formulation quoted above (p. 176) it is the middle finger which is used to raise the pitch by a semitone, when the next lowest note is played on an open string. Thus the chromatic pycna of this group introduce a new principle of fingering, which ought to be explained. Why should the interval A-A# in the Aeolian be noted C C, the interval A-Bb in the Lydian C C? ³

The enharmonic and chromatic share a common notation, but a special difficulty arises in the case of the enharmonic, whenever (as is most common in this group) the *mesopycnon* falls to be played on an open string. In those *tonoi* (Hypoeolian, Aeolian, Hypoionian/Hyperaeolian) which employ open strings for the *mesopycna* only, the intonation of all the other strings could be adjusted into correct relationship with the *mesopycna*; and it was thus possible (on the hypothesis), if difficult, to play in the enharmonic genus in these *tonoi*. In the Ionian and Hyperionian, however, the open B string is used, in the Ionian for *mesē*, in the Hyperionian for *hypatē meson*.⁴ These notes could not be adjusted,⁵ and it was thus impossible to execute the enharmonic in those *tonoi*.⁶ It will readily be agreed that, on the hypothesis, the *tonoi* of this group were not well adapted to the enharmonic. It is indeed hard to credit the practical reality of a scale in which only the enharmonic *mesopycna* were played on open strings. Is it much easier to credit scales in which only the chromatic *mesopycna* were

He also assumes a 'low' Hypodorian, below the fifteen *tonoi* of Alypius, of which the Hyperionian would be a duplicate at the octave. There are no grounds, however, for supposing that the theoretical system ever embraced such a *tonos*: the assumption that Ptolemy conceived his *tonoi* in 'low tuning' is unfounded (see also p. 182, n. 3).

¹ e.g. the tetrachord *meson* of the Aeolian *tonos* in the chromatic genus:

Strings: G A A C

Notation: (TP) (FP) (TP) (TP)

² The exceptional tetrachords are: Ionian *synemmenon*, Hyperionian *meson*, *synemmenon*, and *hyperbolaion* (see p. 180).

³ Again, it is not open to adherents of the hypothesis to say that the A# and the Bb differed in pitch and were therefore noted differently (see p. 175, n. 5). On the hypothesis, both notes were 'píen-tones' (*v. infra*) and their intonation under the full control of the player.

⁴ e.g. the tetrachord *meson* of the Ionian

tonos in the enharmonic genus:

Strings: E ? G B

Notation: (TP) (FP) (TP) (FP)

† means flat by a quartertone.

The F# is played (*ex hypothesi*) on the E string. On the question why a symbol of the F triad is used see p. 178 below).

⁵ See, however, pp. 182 f. for adjustments to the basic tuning which in some cases the hypothesis seems to require—though not on so extensive a scale.

⁶ Gombosi unwisely seeks to support this conclusion by reference to the tables in Alypius, from which the Ionian and Hyperionian enharmonic are absent. They are absent because they fall in a large lacuna, coming at the end of the treatise, beginning half-way through the Hyperphrygian enharmonic, and involving the entire Ionian and Dorian groups. There is no reason whatever to suppose that the original was incomplete. The missing diagram in Arist. Quint. 1, ch. 11 (16. 30 J.) clearly gave the notation of all fifteen *tonoi* in all three genera.

played on open strings? (This type of objection, however, must await a later section.)

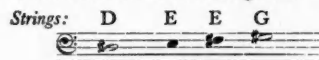
The most serious difficulty which the hypothesis encounters relates to the diatonic form of several of these *tonoi*. In a large number of cases it is necessary to note E-F# and B-C#. *Ex hypothesi* F# and C# were obtained by means of a Ganztongriff on the E and B strings, respectively, but they are noted with symbols belonging to the F and C strings, respectively—strings which were *ex hypothesi* non-existent (or at least, in the case of the C string, not available). For instance, the interval E-F# in the Hypoionian, Hypoaeolian, Ionian, Aeolian, and Hyperionian¹ is noted $\Gamma \curvearrowright$: Γ represents the open E string, and \curvearrowright should represent index-finger pressure on the F string. Why use the symbol of a non-existent string rather than the TP symbol of the string on which the note has in fact to be played?² Gombosi (*Tonarten*, 26) refers to this phenomenon as 'eine Selbstverständlichkeit die in den obigen Regeln eigentlich inbegriffen ist'. The relevant rule is presumably that which he has formulated on the preceding page: 'die abgeleiteten Zeichen bezeichnen Halbtongriffe (von ihrem eigenen Stammzeichen aus gerechnet)'. The symbol \curvearrowright must be played as a semitone above F, but, since there is no F string (in these *tonoi*), it must be played with a Ganztongriff from E. Gombosi seems quite unaware what a serious blow is thus struck at the whole method of interpretation. We are told to regard the notation as a tablature. Surely we are entitled to ask of a tablature that it shall indicate on which string the player is to play and with what fingering. But the notation at this point is governed, not by the *string*, but by the *note*: \curvearrowright indicates a relationship to the note F, not (as we are entitled to expect) to the E string. Similarly with Λ , employed to indicate B-C#: Λ indicates a relationship to the note C, not to the B string, on which *ex hypothesi* the note concerned is played.³

It has, I hope, been shown that the working out of the hypothesis involves a number of difficulties, some more and some less serious. At point after point the expounders of the hypothesis are compelled to provide special explanations which are demanded rather by the phenomena of the notation than by the logic of the hypothesis or the practical probabilities. Those phenomena do not in most cases involve difficulties except on the supposition that the notation is a tablature. Though the purpose of this paper is primarily critical, it may be worth trying to show that the phenomena can be explained on a different set of suppositions, in my opinion with greater plausibility.

(a) The most striking feature of the instrumental notation is the triads. In the *tonoi* which bear the same names as the octave-species,⁴ the pycna are, with few exceptions, noted with complete triads. It is a reasonable working hypo-

¹ The Hyperaeolian exhibits the same phenomenon an octave higher.

² e.g. the tetrachord *meson* of the Hypoaeolian *tonos* in the diatonic genus:



Notation: Γ Γ \curvearrowright Λ
(TP) (FP) (TP) (TP)

The E-string triad is $\Gamma \Lambda \text{E}$, the F-string triad is $\curvearrowright \Lambda \curvearrowright$. See also the illustration in p. 177, n. 4.

³ When Gombosi finds the same combination used to note Cb-Db in the Hyperdorian, he postulates (*Tonarten*, p. 48) the use of both alternative strings. But is there any more reason for postulating it there than for B-C# in the Aeolian and Ionian (etc.)? Sachs (*Rise of Music*, p. 204) suggests that the reason for employing a C symbol was 'probably to avoid a chromatic interpretation': the reason seems hardly adequate.

⁴ i.e. the *tonoi* listed on p. 175 (disregarding the duplicates): the intervals of the octave-species are found in these *tonoi* between F

thesis that the notation was designed in the first place for scales which contained pycna, each pycnon to be represented by a triad. It may indeed have been designed for the enharmonic only and then adapted for use with all three genera. It was first designed for a limited number of *tonoi*.¹ The degrees on which pycna were required together formed a regular diatonic series.²

(b) The crucial question is why, when the notation was used for the diatonic, the *parhypatoeidē* were noted with the same symbol as the chromatic and enharmonic *parhypatoeidē*, with the result that (as pointed out above) the F and C symbols are not used in the Hypolydian. It would be a good reason for so proceeding that in practice, or in the theory of those who devised the notation, the genera did in fact have a common *parhypate*. In the light of the scheme of *chroai* given by Aristoxenus, this does not seem plausible. But an earlier theorist, Archytas, whose formulas are recorded by Ptolemy, did give all three genera a common *parhypate*, and there is reason to suppose that his evaluations were related to actual musical practice.³

(c) The SP symbols are used for *parhypatoeidē* only. The TP symbols are used for *oxypycna*, but also where an 'accidental' is otherwise required. In the latter case they are used with an enharmonic (not a chromatic) value;⁴ they represent, that is to say, a note a semitone above that of the FP symbol. Thus, Dorian *lichanos meson* is noted ♮ to give the note intermediate between the symbols F and C, i.e. between the (modern) notes G and A; Dorian *mesē* is noted ♮ to give the note intermediate between the symbols C and K, i.e. between the notes A and B.

(d) Most of the pycna in the *tonoi* under consideration are based on 'naturals', i.e. they have as their lowest note a member of the basic diatonic series. Where the lowest note of the pycnon is an 'accidental', noted with a TP symbol (i.e. in the tetrachord *synemmenon* of the Dorian and in the tetrachords *meson*, *synemmenon*, *hyperbolaion* of the Mixolydian/Hyperdorian), a difficulty arises in noting the enharmonic. No symbol is available⁵ between this TP symbol and the FP symbol immediately above, which represents a note a semitone higher. The lower quartertone cannot be noted as such; it would seem that the upper quartertone was, therefore, abandoned. Instead, that is, of noting the *oxypycnon* with the SP symbol, the TP symbol was used. For instance, the pycnon of the tetrachord *meson* in the Mixolydian/Hyperdorian (which is the same as that of Dorian *synemmenon*) is noted: C K ♮. It is a form of notation appropriate to the chromatic, but not to the enharmonic.

and F. It has generally been supposed that these *tonoi* were earlier than the intervening *tonoi* of the Ionian-Aeolian group. Gombosi, who believes that they were later, has to assume that the names originally borne by the 'low' *tonoi* were transferred at some stage to the 'high' *tonoi*, which were then renamed Ionian, Aeolian, etc. But, quite apart from the question of nomenclature, it is surely more probable that those *tonoi* whose notation is well adapted to the enharmonic genus are earlier than those whose notation is not.

¹ Cf. *Oxford Classical Dictionary*, s.v. 'Music', 590, col. i. One can only speculate on the number and range of the *tonoi* for which the notation was originally designed,

but Aristoxenus (see p. 180, n. 3) is evidence that the number of *tonoi* recognized was at first small.

² And thus failed to provide a continuous series of quarter-tones—except where the semitones occur in the basic series.

³ Cf. *Class. Quart.* xxvi (1932), 195–208, esp. 202 f., 206 f. To what I have said there I will only add that Archytas' is the only mathematical evaluation of the enharmonic which dates from a period when the enharmonic was certainly alive.

⁴ Taking the illustration in p. 175, n. 4, the interval between FP and TP is a tone in the chromatic, but only a semitone in the enharmonic.

⁵ See n. 2 above.

(e) The same problem arises with much greater frequency in the *tonoi* of the Ionian-Aeolian group, in which the pycna are mostly of this type. Where, however, the *barypycnon* happens to be a 'natural', the pycnon is noted with a complete triad. The instances are Ionian *synemmenon*, Hyperionian *meson*, *synemmenon*, and *hyperbolaion*. It will be observed that these stand in a symmetrical relationship to the 'exceptions' in the other group of *tonoi*, lying a semitone higher in each case.

(f) If, as has generally been supposed,¹ the *tonoi* of the Ionian-Aeolian group were added at a relatively late stage, the fact that their notation is ill fitted to the enharmonic genus may be no serious weakness, assuming that the genus was by then obsolete or obsolescent. It is of course anomalous that the Ionian and Hyperionian include pycna appropriate to the enharmonic, while the Dorian and Mixolydian/Hyperdorian include pycna appropriate only to the chromatic. The scope of these anomalies is, however, small, involving (apart from the tetrachord *synemmenon*) two *tonoi* only—the Mixolydian/Hyperdorian and the Hyperionian.²

(g) Given an original diatonic series with a triad on each note, given common *parhypatoeidē* for all three genera and common notation for chromatic and enharmonic, the system is worked out with perfect logic. The difficulties arise, first, from the fact that the system is based partly on function, partly on absolute pitch; secondly (and mainly) from the fact that the original scheme did not provide a complete series of quartertones.³ It is an imperfect instrument and suffers from certain weaknesses, but its conventions were doubtless thoroughly well understood and gave rise to no difficulty in practice.

An account of the notation can be given on these lines. If an alternative account is produced which involves fewer and more plausible assumptions, no one will hesitate to adopt it. But I cannot feel that the 'pentatonic' hypothesis provides such an account. Naturally, if the 'pentatonic' interpretation of the instrumental notation breaks down (if the notation was based not on strings, but on notes), this does not disprove the hypothesis that the lyre was pentatonically tuned: it merely deprives it of its one substantial ground of support.

V. The practicability of the technique—or rather of the techniques, since Sachs and Gombosi offer different accounts of the way in which finger pressure was used to raise the pitch of strings—will be considered in a later section. Assuming that it was practicable, the tone and timbre of notes so obtained was likely to be different from the tone and timbre of notes obtained from the open strings. 'With its pentatonic *accordatura*, [the lyre] forced the player either to avoid certain notes or to produce them with the help of artificial devices difficult in technique and most probably unsatisfactory in timbre.'⁴ Sachs compares

¹ See p. 178, n. 4.

² Another anomalous effect of the scheme is that TP symbols occur as *oxypycna* in consecutive *tonoi*; for instance, J represents chromatic and enharmonic *lichanos meson* in both Aeolian and Lydian. If the symbol is given a chromatic value in the Aeolian and an enharmonic value in the Lydian, the equation is correct.

³ This is an additional reason for supposing that it was at first designed for a com-

paratively small number of *tonoi*. The fact that anomalies occur in the Mixolydian/Hyperdorian may suggest that this *tonos* was not embraced in the original scheme. It may, therefore, be significant that the predecessors of Aristoxenus (*Harm.* 128. 6–23 Macran) were not agreed about the position of the Mixolydian *tonos*.

⁴ Sachs, *Rise of Music in the Ancient World*, p. 229. Cf. Reese, *op. cit.*, p. 25.

the notes produced by 'stopping' to the pien-tones of Chinese pentatonic music, and the term is convenient. If the pien-tones were less resonant than the others, one would expect the character of a scale (and of the music played in it) to be greatly affected by the number, position, and function of the pien-tones employed; and it is in fact suggested by Gombosi and Reese that variations of this kind may have contributed to *ethos*.¹ Little or no attempt, however, has been made to work out this idea in detail.

One general observation. These variations (if they really existed) belonged only to the music of the lyre and cithara. If music written in a particular genus in a particular *tonos* had a certain character owing to the distribution of pien-tones, then, when that same music was played upon the aulos, this character was presumably absent, unless (which is an extravagant supposition) the aulete tried deliberately to reproduce it. Now, although different *ethos* was attributed to different types of instruments, and although certain *harmoniai* were particularly closely associated with certain instruments, it is likely that all the principal *harmoniai* were played both on the aulos and on strings (and occasionally on both together).²

If, however, we confine our attention to the strings, we find some rather surprising phenomena. It would carry us too far afield to go into the controversial questions of tonality and modality. Gombosi holds that there was fundamentally one tonality only—that of the basic system with its structure of tetrachords bounded by 'standing-notes'—a tonality which can be described as Dorian, since the 'Dorian' octave is the kernel of the Greater Perfect System; he holds that the other octave-species were merely redistributions of the Dorian octave. I am not here concerned to controvert that view, which is supported by some, though not all, of the evidence.³ In a paper read to the International Congress of Musicology at New York in 1939 Gombosi said: 'The interior tones of the tetrachords are rather variable in pitch, having no open string at their disposal but being produced artificially by pressure on a string sounding the lowest note of the tetrachord in question. So we do not wonder that ancient theorists like Aristoxenus discussed diverse *chroai*, or colours of pitch.'⁴ The statement in the first sentence is true on the hypothesis (of the enharmonic and chromatic and of the diatonic *parhypatoeidē*), but it is only true in some *tonoi*. For the distribution of pien-tones pays no respect to the tetrachordal structure, nor could it do so, given the rigid system which is assumed. To consider only the fate of dynamic *mese*: it is a pien-tone (among 'high' *tonoi*) in the Dorian and Hyperdorian, (among 'low' *tonoi*) in the Hypoionian, Hypoaeolian, Aeolian, and Hyperaeolian. It is surprising, perhaps, that Dorian *mese* (to which such importance is attached) should be a pien-tone at all, and surprising

¹ 'In lyre or kithara music, the fact that a tone produced by a stopped string would, in the absence of a fingerboard, be more muffled than a tone produced by an open string, may have had an effect on *ethos*' (Reese, op. cit., p. 45). Cf. Gombosi, *Tonarten*, p. 142.

² The Phrygian was especially associated with the aulos, but Plato in the *Laches* (see p. 172, n. 5) implies that a lyre might be tuned to the Phrygian *harmonia*. Pindar also provides evidence: compare *Ol.* 5. 21 with *Nem.* 4. 44 f., and *Nem.* 3. 79 with *Pyth.* 2. 69.

Ptolemy seems to imply that the lyre-players employed all the seven *tonoi* of his theoretical system.

³ The evidence is examined in my *Mode in Ancient Greek Music*. See also Grove's *Dictionary of Music and Musicians*, 5th edition, iii. 774-9.

⁴ *Papers read at the International Congress of Musicology*, published by the Music Educators' National Conference for the American Musicological Society, New York, 1939, p. 181.

(if the distribution of *pien-tones* affected *ethos*) that it should be a *pien-tone* in the 'high' Dorian, but not in the 'low' (i.e. Hypolydian).¹

Again, in some *tonoi* the proportion of *pien-tones* to open strings is exceedingly high, when one considers that the device was 'difficult in technique and most probably unsatisfactory in timbre'. The extreme examples are those enharmonic scales (see p. 177 above) in which only the *mesophrygia* are played on open strings. This seems almost a *reductio ad absurdum*; and the reasonable conclusion to be drawn would be that the enharmonic was not in fact played in these *tonoi* (if the main hypothesis is correct). But the chromatic versions of these scales are hardly more plausible. In the case of the diatonic, it might be argued that the string-players avoided systems which involved an excessive number of *pien-tones*. This would have meant avoiding (for example) the 'high' Dorian and the Hyperdorian ('high' Mixolydian), which both have five *pien-tones* to three open strings.² It is true that the favoured cithara scales as given by Ptolemy involve a small number of *tonoi* and (in the 'low' tuning)³ a relatively simple scheme of 'Griffe', but Ptolemy seems also to imply that all his seven *tonoi* were employed on the lyre, the technique of which was *ex hypothesi* the same.

VI. Gombosi devotes a careful—and in many respects illuminating—discussion to the cithara scales of Ptolemy (second century A.D.), in the course of which he points out that the notes E–A–B–E, in the same intonation, are common to them all, the ratio of the central interval being 9/8 (i.e. it is a major tone). These are all *ex hypothesi* from open strings. The G and D strings also are used, in nearly every case, as open strings.⁴ Now it is assumed by Sachs—and, I think, accepted by Gombosi—that the pentatonic *accordatura* of the lyre and cithara was achieved by means of consonances, with the result that the tones (G–A, A–B, D–E) were all major tones in the ratio 9/8. The intonation of the *pien-tones* was of course under the control of the player. Playing in the Dorian, for instance, he could with equal ease produce tetrachords in the 'ditonal' diatonic ($256/243 \times 9/8 \times 9/8$) and in the 'tonal' diatonic ($28/27 \times 8/7 \times 9/8$). Not so, if the top interval of the tetrachord is other than a major tone (as in the 'tense' diatonic); not so in other *tonoi*, in which the standard tetrachords occupy different positions.⁵ In Ptolemy's cithara scales, while the A–B interval required is always 9/8, the D–E interval varies: in Iastiaiolia and Hypertropa it is 8/7, in Lydia 10/9;⁶ similarly, the G–A interval is in four cases (Tropoi,

¹ See p. 176, n. 3.

² Gombosi, *Tonarten*, p. 27, suggests that the 'high' tuning came to be preferred because of 'der schärfere, hellere und stärkere Klang der angespannteren Saite'. But in the 'high' Dorian only three notes out of eight are on open strings and only these could have possessed a stronger tone.

³ Cf. Gombosi, *Tonarten*, 108 ff. On this assumption the evidence of Ptolemy can be brought into relation with that of Porphyry and Bellermann's Anonymus. Gombosi argues convincingly on this point. It is not correct, however, to suppose that Ptolemy, in his theoretical system, conceived his *tonoi*

as 'low' *tonoi*. Rather, he regarded such a distinction as irrelevant. Gombosi's argument (*op. cit.* 99) is based on a misunderstanding of Ptolemy H., ch. 11 (65, 24 ff. D.).

⁴ But not the G string in Iastiaiolia.

⁵ In the Hypodorian, for instance, the lower of the two standard tetrachords runs from F# to B. If G–A is fixed at 9/8, the intonation will inevitably be that of the 'ditonal' diatonic. To obtain the 'tonal' diatonic, the G string must be lowered in pitch.

⁶ The correct nomenclature is given at 80. 18 D. At 39. 14, where the MSS. have *λύδια καὶ λάστια*, I suspect that we should read *λύδια καὶ λαστ(αιόλ)ια*.

Hypertropa, Tritai, Parhypatai), not 9/8, but 8/7.¹ Either the strings, after a preliminary tuning by consonances, were readjusted or they were tuned in the first instance without the aid of consonances.² A similar need for special tuning or retuning occurs in many connexions. To quote one further example, the Lydian, according to the Sterea intervals as given by Ptolemy for the lyre, requires a septimal tone (8/7) as the middle interval of the octave system; this means, in the 'low' tuning, a septimal tone between A and B, which are sounded *ex hypothesi* on open strings.³

The pentatonic hypothesis is not of course disproved by showing that a considerable amount of retuning of open strings might be involved in passing from one *tonos* to another. It does, however, seem progressively to lose its logic and coherence the more that current adjustments have to be made to the basic pentatonic framework.

VII. Finally, it must be considered whether the technique or techniques of fingering were practicable. And here it is not perhaps without significance that Gombosi, despite his firm adherence to the pentatonic hypothesis, came to the conclusion that the technique envisaged by Sachs was in fact impracticable upon the Greek lyres and citharas. We shall have to consider, therefore, both the original theory of Sachs, in the light of Gombosi's objections, and the theory substituted for it by Gombosi.

The evidence for the mode of playing on these instruments is partly literary, partly monumental. The literary evidence is scanty and not very clear; the monumental evidence, mainly in the form of vase-paintings, is plentiful, but its conventions are not always easy to interpret. The subject requires an extensive treatment of its own,⁴ but even a superficial consideration reveals a few facts by which the hypothesis can be tested.

The left hand plucked the strings with the bare fingers. This is clear from the literary evidence and consistent with the prevailing artistic convention, which shows the fingers of the left hand spread across the strings.⁵ The right hand generally used a plectrum. It has been suggested that a lute technique was employed by which the player swept across all the strings, perhaps simultaneously damping some of them with the fingers of the left hand. There is no positive evidence for this, and, even if such a technique was sometimes used, there is no doubt that the right hand was also employed, with or without plectrum, to sound individual strings, though what determined the distribution of functions between the two hands is not clear.⁶

Sachs's view is that the effective length of the string was shortened by finger pressure (as, for instance, on the violin). Considered in the abstract, this shortening could take place at either end of the string, below the cross-bar or

¹ Gombosi (103, 105) calls attention to these ratios.

² As implied by Porphyry, ad H. 126. 10 ff. D. (one of our rare pieces of direct evidence about tuning).

³ The false fourth and false fifth which the tuning involves occur between open strings.

⁴ Gombosi, *Tonarten*, 48 ff., 121 f., and M. Wegner, *Das Musikleben der Griechen*, furnish valuable catalogues of vase-paintings and other monuments containing representations

of lyre-type instruments.

⁵ Whether or not the fingers of the left hand ever *damped* strings (as has been suggested), they certainly also *plucked* them.

⁶ The passages relating to the *Aspendius citharista* (Cicero, II *Verr.* 1. 53; the scholiast ad loc.; the proverb in Zenobius 2. 30 and Plutarch, *paroem.* 120) are not so informative as we could wish, but imply that it was a *tour de force* to dispense entirely with the right hand.

above the bridge. Both regions were accessible to the right hand, in order to stop for the left. But the right generally held, and is represented as holding, the plectrum: it seems improbable that it was constantly dropping the plectrum (letting it swing on the cord?) in order to stop strings with the fingers and it is probably never represented as doing so.¹ The left hand could not reach a point close to the bridge, because the body of the instrument was in the way. It might appear, however, that it could stop strings by pressing near the cross-bar; and this, I take it, is what Sachs envisages. But the mobility of the left hand was restricted, as Gombosi and Wegner point out. Both lyre and cithara were held in position by a band attached to the left wrist.² This band allowed the fingers to reach the middle region of the strings, but not (it is clear) the neighbourhood of the cross-bar.

Thus neither was the left hand able to stop for the right nor (probably) the right hand for the left. Gombosi further states that 'strings as thin as those of the lyre instruments can be stopped only by being pressed against a stable and hard object; for want of a fingerboard, only the cross-bar could serve this purpose'.³ And the cross-bar could not be reached with the left hand. Unable to accept Sachs's view, yet convinced that the lyre and cithara were pentatonically tuned, Gombosi advances a different theory. The pitch of the strings was raised, not by decreasing their length, but by increasing their tension; and this was done by pressing with the plectrum between the bridge and the fastening, i.e. on the non-sounding part of the string. He quotes the analogy of the Japanese koto, which is treated in a similar manner, one hand plucking the strings, the other raising their pitch, as necessary, by pressure below the bridge. It is assumed that before the introduction of the plectrum the fingers were used in ancient Greece also and that this method was occasionally employed in later times.

As positive evidence that this manner of playing was current in ancient Greece Gombosi can only point to certain vase-paintings (one of which he reproduces) in which the right hand is shown in the position it would have to occupy in order to perform the operation in question. Now the position of the right hand in the numerous paintings of lyre-players and citharodes varies greatly. Sometimes it is well to the right of the instrument, sometimes below the instrument, sometimes between the instrument and the spectator's eye but not near the strings, and so on. Is it an excess of scepticism to suggest that some paintings were likely to show the hand (and plectrum) against the strings between the bridge and the fastening, by mere chance or because this suited the composition of the painting, and not because 'the player was engaged in a specific musical operation? On the Brygos amphora in Boston it looks as though the plectrum were inserted between two strings. This may be just an accident of drawing (and I believe it is); it may represent the operation which Gombosi supposes. If a substantial number of paintings could be shown to convey a

¹ The citharist, for instance, on the Munich crater (3268—Wegner, pl. 22) is *tuning* the instrument? But see p. 186, n. 1.

² Cf. Gombosi, *Tonarten*, p. 119, and pp. 179 ff. of the paper referred to on p. 184, n. 4; Wegner, *Musikleben*, p. 33. This is very clearly shown, for the cithara, on the London hydria (B 300—Wegner, pl. 8); for the lyre, on the Berlin Duris cup (Pfuhl, *Masterpieces*, no. 65).

³ In order to raise the pitch by a major

tone, the string length must be decreased by a ninth, and I do not see how in fact the cross-bar could be effectively used in this operation. But on these technical matters the non-expert hesitates to speak. It seems highly probable that, if strings were in fact stopped without a fingerboard, the tone would at least be very poor: the poorer the tone, the more weight attaches to the objections raised in Section V.

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similar impression, this might outweigh the probability that the position of the plectrum is due to chance or to artistic considerations. Meanwhile, the few examples given provide a weak support for the theory, on which the following comments may also be made.

(a) If the right hand was able to perform this function in aid of the left, the service could not be returned. It follows that the right hand (with or without plectrum) could only play on open strings. This is a serious objection in music which *ex hypothesi* makes so much use of *pien-tones*. It can only be met by whitening down the functions of the right hand as regards the playing of notes. But it is not plausible to carry this process too far. The plectrum (*πλήκτρον*) was, after all, an article for 'striking' the strings, and we are not justified in supposing that its main function was to press them.¹

(b) The cithara projected at right angles from the body of the performer, who was generally standing, and the strings were easily accessible to his right hand throughout their entire length. The lyre and barbiton, on the other hand, were often played by a seated performer, who held the instrument tucked into his left hip. One cannot assert that in this case it was impossible for him to reach the strings between bridge and fastening and to operate upon them with precision, but this part of the strings was so close to the body (and to the clothing) that the technique would seem to be most awkward. Yet it must *ex hypothesi* have been employed upon these instruments no less than upon the cithara.

(c) On Sachs's view, the SP and TP symbols of the triads indicate a difference of fingering, not of string-length and pitch. The TP symbol is used, not only for the Ganztongriff, but frequently also for the Halbtongriff. Gombosi cannot, therefore, equate the two symbols with two degrees of pressure (which would give a logical, though perhaps unparalleled, basis for a notation²): he too must relate the symbols to fingering. I understand him to mean that, for the Ganztongriff, pressure was exercised by both the index and middle fingers; that, for the Halbtongriff, pressure was exercised either by the index finger alone (if the next lowest string was also modified) or by the middle finger alone (if the next lowest string was played open); that the TP symbol was used, if the index finger was involved either alone or in combination with the middle finger.³ Why it should have been technically necessary or convenient to use the index finger for the Halbtongriff, simply because the next lowest string also required modification, is by no means clear.⁴ But that is not the chief difficulty. The plectrum, as we are told by Philostratus⁵ and can see from vase-paintings, was firmly gripped (*ἀπρίξ*); and the normal grip, sometimes shown with the index finger outstretched along the top, was presumably sufficient for the greater degree of pressure required for a Ganztongriff. It is far from clear that the addition of the middle finger would have been necessary or helpful. What is quite clear is that the use of the middle finger *alone* (for exercising the pressure) conflicts entirely with the manner of holding the plectrum which is shown in the vase-paintings.⁶

¹ Cf., e.g., *Hom. Hymn to Apollo*, 184 f.; Pindar, *Nem.* 5. 24; Eur. *Her.* 350.

² The Japanese have technical terms for single and double pressure.

³ As noted on p. 177, there seems to be an exception to this rule.

⁴ I am not quite sure what Gombosi im-

plies when he says (*Tonarten*, p. 120): 'wenn d. Plektron über zwei Saiten quergelegt werden mußte'.

⁵ Philostratus *minor*, *Imag.* 6 (400. 25 Kayser).

⁶ It is not clear that the technique would be any more appropriate to the use of the

It would appear, then, that both the methods which we have been considering involve technical difficulties. As I stated at the beginning of this article, I am aware of the difficulties which the orthodox view—one string, one note—itself involves, and I am not concerned to argue that in no circumstances was any such technique employed. It may be that the Greek virtuosi, especially from the late fifth century onwards, succeeded in overcoming the difficulties to the extent of occasionally supplementing the open strings with a note of thinner tone obtained by stopping.¹ (For it seems more likely that, if employed at all, it was a genuine technique of stopping than the koto technique envisaged by Gombosi.) But it is indeed hard to believe that stopping or other finger pressure was employed systematically and to the extent implied by the pentatonic hypothesis as inferred from the instrumental notation. That hypothesis itself, as I trust I have shown, rests upon extremely insecure foundations.

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fingers without plectrum. In any case the use of the plectrum was normal from a period which must long antedate the notation.

¹ Cf. F. Behn, *Musikleben im Altertum und frühen Mittelalter*, p. 89. Since writing this article, I have seen a RF cup in Mykonos

Museum (KZ 1402), representing a player with his left hand on the strings and his right hand on the cross-bar, as on the Munich crater (see p. 184, n. 1). The fact that his mouth is open suggests that he is playing rather than tuning his instrument.

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PALATINE APOLLO

THE purpose of this note is to redirect attention to some of the literary evidence that concerns the site of Apollo's temple on the Palatine. For this evidence has an irritating habit of refusing to confirm what would otherwise be irrefutable archaeological proof of the temple's site. It is now fashionable to identify the site of the temple with that occupied by the temple-core that was originally assigned to Iuppiter Victor on the south-west angle of the Palatine in the region of the Scalae Caci, the Temple of Magna Mater, the Casa Romuli, and the so-called House of Liuiā. This was, in the view of most scholars, Euander's citadel that Virgil calls Pallanteum and this must be the site of the Augustan buildings. Now the House of Liuiā has been identified with apparent probability as the House of Augustus, and we know from literary evidence (Suet. *Aug.* 29, 72, Vell. 2. 81, Dio Cass. 49. 15. 5) that the temple of Apollo, Augustus' private house, and the house decreed to him by the senate (Richmond, *J.R.S.*, 1914, pp. 194 f.) must have been in close proximity to each other. The temple-core on the south-west of the Palatine is of Augustan date and is built over the remains of houses of the late republic¹ which appear to have been demolished for the purpose. If Liuiā's House was the house of Augustus then Iuppiter Victor's temple must be assigned to Apollo.

This identification, first advanced by Reber and revived by Pinza (*Bull. Comm.* i, 1910), was championed by O. L. Richmond ('The Augustan Palatium', *J.R.S.*, 1914, pp. 193-226) and his arguments are tantalizingly convincing. Lugli (*Roma Antica*, pp. 434 ff., 468 ff.) is prepared to accept this identification, and it is now regarded as being no longer *sub iudice* (cf. Guey, 'Avec Properce au Palatin, Légendes et Promenade', *R.E.L.*, 1952, pp. 186-202 and esp. p. 199—'TEMPLUM APOLLINIS PALATINI . . . dont la localisation, longtemps controversée, ne peut plus être contestée aujourd'hui').

Let us now look at some literary evidence. Lugli in his guide-book *The Roman Forum and the Palatine* (1952) says (I quote the English translation): 'Having proved² that the house we have described is that of Augustus it is easy to show that the Temple that stands to the south and is usually called the Temple of Iuppiter Victor is really the famous Temple of Apollo. . . . It should be mentioned, however, that it is not yet possible to interpret the passages of Ovid or Festus in a manner satisfactory to this attribution' (pp. 110-11). These words are valuable. First, because they admit the existence of uncertainty and secondly because they betray an outlook which is unscientific. The passages to which Lugli refers are Festus 258 (Müller) [i.e. 346 (Lindsay)] and various references in Ovid, *Tristia* 3. 1.

Ovid's poem is a fanciful introduction to his third book of poems written on the shores of the Black Sea. The poet sends his book to Rome, and it is the book itself that utters the first 20 lines of the poem on its arrival in the Capital. The book asks for a guide to show it a resting place (i.e. a library where it will be welcome in Rome). A guide offers himself and the journey begins. The guide

¹ The Temple of Iuppiter Victor was vowed in 295 B.C. and presumably built sometime soon thereafter: this seems to refute its claim. Similarly with the claims that have been advanced on behalf of Iuppiter

Propugnator.

² There is no proof that this was Augustus' house. It merely seems likely. Supporters of the Reber-Pinza-Richmond theories will naturally tend to take proof for granted.

points out landmarks as they walk. Here are the stages of the journey: the Fora of Iulius and Augustus (27), the Via Sacra (28), the Temple of Vesta (29), the Regia (30), the Porta Mugonia (31), the Temple of Iuppiter Stator (32), and part of the *pomerium* of Romulus (32). I quote from line 31.

inde petens dextram 'porta est' ait 'ista Palati,
hic Stator, hoc primum condita Roma loco est.'
singula dum miror, uideo fulgentibus armis
conspicuos postes tectaque digna deo.
'et Iouis haec dixi 'domus est?' quod ut esse putarem,
augurium menti querna corona dabat.

Ovid's book has been conducted by its guide to the Porta Mugonia on the north-east side of the Palatine. Here, says the guide, pointing (probably) to the left, is the Temple of Iuppiter Stator, and here is the site where Romulus founded the city.¹ Then *singula dum miror* he sees a house worthy of a god, which is, of course, the house of Augustus. The guide and his curious charge are still at the Porta Mugonia; for *miror* hardly denotes motion of any type, let alone the ascent of the Palatine to its furthestmost cliff. And if the house of Augustus is here, then so is the Temple of Apollo and the Libraries. Unless Ovid was deliberately trying to mislead, the carefully detailed description of the walk from the Fora to the Porta Mugonia followed immediately by mention of the house of Augustus must mean that the house was on the north-east corner of the Palatine overlooking the Via Sacra or else in the area of the so-called Cliuus Palatinus.

It may have seemed impertinent to accuse Lugli of lack of scientific method, but to state as he does (*loc. cit.*) that it is impossible to interpret a passage of Ovid—a contemporary who must have seen the house and temple with his own eyes—in a manner satisfactory to an attribution made by modern scholars is surely the reverse of scientific. Before considering the passage of Festus already referred to, there is another passage of greater importance which has something to tell us of Apollo's site on the Palatine.

Propertius fired, possibly by the eighth book of the *Aeneid*, to write aetiological poetry represents himself in the first poem of his fourth book as having a dialogue with the Babylonian astrologer, Horus. Lines 3 and 4 of this poem read

atque ubi Nauali stant sacra Palatia Phoebo,
Euandri profugae procubuere boues!²

¹ There seems to be no certainty what Ovid means by this. According to Tacitus (*Ann.* 12. 24) the *pomerium* of Romulus included four points, the *ara maxima* of Hercules (in the Forum Boarium), the altar of Consus (in the Circus Maximus), the *curiae ueteres* (north-east corner of Palatine), and the sacellum Larum. It is disputed whether Tacitus' *sacellum* is the *aedes* restored by Augustus in *summa sacra uia* (*R.G.* 19. 2) or whether it is the *ara Larum Praestitum* mentioned by Ovid (*Fast.* 6. 791-2) (for a discussion cf. Platner-Ashby, pp. 314-15). But it is probably to the former that Tacitus refers, as he continues his line from the

sacellum Larum to the forum Romanum (i.e. straight down the *via Sacra*). It is, therefore, tempting to assume that this *sacellum Larum*, mentioned by Tacitus in connexion with the *pomerium* of Romulus, stood on a site connected with Romulus. The *sacellum* or *aedes* was situated in the region of the Arch of Titus and might well have flanked the Porta Mugonia on the opposite side from the Temple of Iuppiter Stator.

² Richmond would transpose these lines to follow lines 7 and 8, and read *concubuere* (with the MSS. except Vo), i.e. *concubuere cum tauris*. This will not affect my argument.

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'and where stands the Palatium sacred to Phoebus of the ships,¹ the exile cattle of Evander lay'.

This again is taken to indicate a site on the south-west corner of the Palatine near the *Scalae Caci*. In defence of this attribution, the evidence of *Aeneid* 8 is produced to show that the citadel of Euander was on this corner of the Palatine. Indeed it was (cf. *Aen.* 8, 98), but Propertius does not say that Palatine Apollo is to be found there. He says that he is to be found where the cattle of Euander pasture: and we happen to know where that was. For the itinerary of Ovid that has been concerning us was probably modelled on another and more famous itinerary, the walk of Euander and Aeneas that Virgil relates in *Aen.* 8, 306-69.

The passage begins:

exim se cuncti diuinis rebus *ad urbem*
perfectis referunt.

If Virgil had meant *ad arcem* he would have said so; the *arx* was on the south-west corner of the Palatine; in view of the site reached at the end of the journey which is to lead *ad urbem* it would seem that Euander's city was elsewhere. The journey takes the two men past the altar and gate of Carmenta (337). Euander points out the asylum (342), the Lupercal (343), the Argiletum (345), the Tarpeian rock (unless *Tarpeia sedes* simply means the 'Capitol'), and the Capitol (347). They look across to the Ianiculum (358), and then view the *arx* of Saturn (i.e. the Capitol again). Finally:

talibus inter se dictis ad tecta subibant
pauperis Euandri, passimque armenta uidebant
Romanoque foro et lautis mugire Carinis.

As Warde Fowler says (*Aeneas at the Site of Rome*, p. 74); there can be no doubt where the house of Euander was. To have seen the cattle on the Carinae and in the valley of the forum, Aeneas and Euander must have been somewhere in the region of the future sites of the Arch of Titus, the Porta Mugonia, and the Temple of Iuppiter Stator. Here was the hut of Euander, and then follow the famous lines:

ut uentum ad sedes 'haec' inquit 'limina uictor
Alcides subiit, haec illum regia cepit.
aude, hospes, contemnere opes et te quoque dignum
finge deo, rebusque ueni non asper egenis'.

Warde Fowler has an excellent passage in which he compares the hut of Euander to the house of Augustus (op. cit., pp. 75 f.). He draws attention to this point in Ovid's itinerary and to the lack of luxury in the house of Augustus as described by Suetonius (*Aug.* 72). It is this passage of Virgil, says Warde Fowler, that Ovid has in mind when he talks of *tecta digna deo*.² Before we leave Virgil there are two more parallels between Euander and Augustus which have escaped commentators: Euander is where he is because of *deus auctor Apollo* (336); and the expression (of Euander's house) *angusti fastigia tecti*. The *fastigium* betokened divinity in the owner of the house.

¹ Because of Actium.

² But Warde Fowler's article in *C.Q.*, 1910, pp. 145-55 and particularly the note at the beginning seem to imply that he had

accepted the south-west corner as the site of Apollo's temple. But perhaps he had rejected by 1917, the date of 'Aeneas at the site of Rome'.

The statements of Virgil and Propertius are not precisely the same. Propertius says that the Temple of Apollo is where the cattle of Euander were lying down; Virgil tells us that the cattle covered the Carinae and the valley of the Forum and could be seen from Euander's house, which we can safely deduce was on the Velia somewhere near the site of the Arch of Titus. Propertius probably meant to imply simply that it was on the north-east side of the hill (i.e. the side associated with the valley in which Euander's cattle grazed). There is no evidence that Euander's cattle were kept on the summit of the Palatine. We have the additional evidence that Ovid places the house of Augustus and temple of Apollo at precisely the spot where Virgil places the house of Euander, a house which he describes in a manner that is more readily explained if Augustus was in his mind. This coincidence cannot be overlooked.

Now if the Temple of Apollo was at the site originally proposed by Hülsen or else in that region, the passage of Festus presents little difficulty. 'Quadrata Roma' can be in the so-called 'Area Palatina' before the temple of Apollo as Festus said it was: clearly Festus is referring here to the 'Mundus' (cf. Platner-Ashby, p. 347), or perhaps more correctly a *mundus*: and the difficulties encountered by Pinza and Richmond do not arise.¹

There are two other passages of Latin literature that point to the north-east corner of the Palatine as the site of the Temple of Apollo. I refer first to Tacitus, *Historiae* 1. 27. Galba is sacrificing *pro aede Apollinis*. In the crowd (*nam proximus adstiterat*) is Otho who is awaiting a signal from his freedman Onomastus, which will enable him to start the revolution that will depose Galba and give him the imperial throne. On receipt of the signal, Otho leaves for the end of the Forum by the Temple of Saturn. This is the route he follows 'per Tiberianam domum in Velabrum inde ad miliarium aureum sub aedem Saturni pergit'. Why through the house of Tiberius? Presumably Otho was in a hurry. If the Temple of Apollo was on the south-west corner of the hill, then the *Scalae Caci* were available as a short cut to the Velabrum. To go through the House of Tiberius seems unnecessary: there was no need for secrecy. Galba was busy at the sacrifice, and Otho might well run into trouble inside an imperial palace. But if the temple was on the north-east corner of the hill, then he left the area Palatina by the *Cliuius Victoriae* which took him literally through *but not into* the domus Tiberiana (cf. illustration, Lugli, *Roma Antica*, p. 483) and then descended to the Velabrum.

Secondly, I believe that Martial 1. 70 supports a site on the north-east corner of the hill. Here as in the Ovid passage already quoted an itinerary is described and the imagined traveller is a book. The journey is from Martial's house *ad Proculi nitidos lares* on the Palatine. Martial continues:

quaeris iter, dicam. uicinum Castora canae
transibis Vestae uirgineamque domum.
inde sacro ueneranda petes Palatia cliuo,
plurima qua summi fulget imago ducis.
nec te detineat miri radiata colossi
quae Rhodium moles uincere gaudet opus.
flecte uias hac qua madidi sunt tecta Lyaei
et Cybeles picto stat Corybante tholus.

¹ I accept the view that *Roma Quadrata* was the name of a particular *mundus*, of which there may have been more than one, on the

Palatine. It is possible that Ovid's words *hoc primum condita Roma loco est* refer to the site of the *mundus* called *Roma Quadrata*.

The route lies past the Temple of the Castors and the Temple of Vesta and continues along the Sacred Way (*sacro cliuo*) towards the Velia on which in Martial's time stood the Colossus of Nero, the tecta Lyaei, a shrine to Bacchus in the region of the later Basilica of Maxentius, and the *tholus* of Cybele. (It is important here not to confuse this with the Temple of Magna Mater overlooking the Tiber on the south-west side of the Palatine.) On turning to the right here towards the so-called cliuus Palatinus the traveller will see a large house:

protinus a laeua clara tibi fronte Penates
atriaue excelsae sunt adeunda domus.

This is Proculus' house, but instead of the theme *aude hospes contemnere opes* that greeted Virgil's traveller we have the parody:

hanc pete: ne metuas fastus limenque superbum
nulla magis toto ianua poste patet

and there follows this significant addition:

nec propior quam *Phoebus* amet doctaeque sorores.

Phoebus is appropriate here as the patron of poetry welcoming Martial's volume of poems; he is doubly appropriate as the occupant of the great temple in the immediate vicinity.

This note is negative in character in that it establishes no new theory; but the literary evidence for the site of the Temple of Apollo appears, on the one hand to be so much at variance with the archaeological evidence, and yet on the other to be so convincing in itself, that it seemed to the author that more prominence should be given to the various discrepancies enumerated here. If they can be convincingly explained away, then let Apollo be established in the south-west angle of the hill once more, and let the house of Liuia be the house of Augustus. Richmond's views are attractive, and have many advantages if only the literature would support them. But until then let us give due weight to the views of Virgil, Propertius, and Ovid, whose evidence is that of the contemporary eyewitness.

There is a further mystery connected with this site. What does Statius mean when he refers in *Siluae* 4. 2. 20-21 to *uicina Tonantis regia*? He is writing of the triclinium of Domitian's palace, which very room was the immediate neighbour of the temple that has been identified as that of Apollo Palatinus. But if it is not Apollo's, then it is hard to claim it for Iuppiter Tonans as there is no record of such a temple on the Palatine. Nor did Augustus build or restore any temple to any Iuppiter on that hill. Yet the temple-core is Augustan. And if it is Iuppiter Propugnator or Victor that is referred to—for Statius often uses Tonans as a synonym for Iuppiter in any capacity—then this is the only evidence we have for an Augustan restoration of a temple to either deity. But if it is a restoration it would have been built on the old site and not over republican houses. Nevertheless, both Iuppiter Victor and Iuppiter Propugnator wield the thunderbolt on coins (cf. Grant, *Roman Imperial Money*, p. 234; *B.M.C.* 5, p. 176, no. 132). Theories that the temple of Iuppiter on the Capitol is meant are plainly absurd.

The Flavian Palace contained a so-called 'Basilica Iouis'. This would explain *regia*, but would make nonsense of the poet's words. Statius is saying that the neighbouring palace of the Thunderer is surprised at Domitian's house. If the

thunderer is Domitian, then the passage becomes ridiculous. The only reasonable explanation is that the neighbouring temple is the *regia Tonantis* referred to and that Augustus did restore the temple of Iuppiter Propugnator or Victor (both of which are known to have existed on the Palatine): or else that this is the sole record of an Augustan temple of Iuppiter Tonans on the Palatine, but this is well-nigh impossible in view of the fact that Augustus built a temple to Tonans on the Capitol. But I cannot conceal my belief that the *uicina Tonantis regia* has some light to shed on the temple-core that we have been discussing.¹ This is all I can offer in return for my proposal to banish Apollo until he can establish a better claim.

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J. H. BISHOP

¹ Statius is talking of the palace of Domitian: hence a *uicina regia* will be a neighbouring building. *uicina regia Tonantis* cannot, in this context, merely refer to the sky.

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PHAEDO III c 4 ff.

THE publication of Mr. R. S. Bluck's stimulating *Phaedo* prompts me to ask the following questions concerning the traditional interpretation of the cosmographical passage beginning 108 e. (1) Do the terms of 108 e-109 a in combination with 110 b 5 ff. and *Timaeus* 40 b-c and 62 d ff. prove conclusively that in the *Phaedo* Plato thinks of the earth as a spherical body? (2) Granted that he does, need his description of the earth, as a setting for his eschatological myth, conform with the spherical theory?

As for (1), I am sceptical. The description of the position of the earth in space, 108 e ff., with its ambiguous *περιφερής* may well refer to a construct of concentric rings in the Ionian tradition, as recently outlined by Professor J. S. Morrison, in *J.H.S.* lxxv (1955), 59 ff. Neither *ισόρροπος* 'evenly weighted', as applied to the earth, nor *ὁμοιος* 'homogeneous' (in the Parmenidean sense), as applied to *οὐρανός*, favour the sphere-concept over the disc-concept, while the use of *κλῆθῆναι* rather favours the latter; contrast *ἐνεχθείη* *Timaeus* 63 a. Apparently Plato does not consider *ισόρροπος* and *ὁμοιος* interchangeable, as he would if the sphere-concept were fully recognized by him. The *δωδεκάσκιυτοι σφαῖραι* 110 b 6 (note the plural!) serve as a simile to characterize the texture of the surface of the earth—with some allowance for curvature—not the earth as a body in space. The *Timaeus* passages, difficult as they are, only prove that after years of associating with astronomers, Plato may have come to think in spherical terms, while largely continuing to use traditional planimetric terminology.¹ However, I do not propose to pursue this speculation; it does not affect the answer to (2).

(2) Here the answer is much simpler. Whatever the interpretation of 108 e ff., the geographical-eschatological passage requires for its understanding a complete disregard of spherical considerations. This is only natural. A myth of this sort which is vitally concerned with the distinction between 'above' and 'below'—the true world, our world, the underworld—presupposes an image, however vague, of a flat earth with a fixed horizon. Plato tells the myth as Socrates might have told it, in the days of Diogenes, Archelaus, Anaxagoras, Democritus.² Once this premise is accepted, many of the difficulties which have hitherto beset interpretation and translation should disappear. Some mystification must be expected in a logos of this sort; the courses of the rivers of hell cannot be mapped out inch by inch. But I hope that in the following annotated

¹ Strictly speaking, the *Timaeus* tells us nothing whatever about the shape of the earth. Cf. the commentaries of Taylor, pp. 226 ff., 237, and Cornford, pp. 120 ff., 134.

² The picture of underground rivers of water and fire agrees with the views which Seneca, *natur. quaest.* 6. 7 ff. ascribes to *quidam*, i.e. some writers in the succession of Thales. In spite of P. Friedländer, *Platon*, vol. i (Berlin, 1928), p. 243, note 1, and H. F. Cherniss, *Aristotle's Criticism of Presocratic Philosophy* (Baltimore, 1935), pp. 395-6, the arguments of E. Frank, *Plato und die sog. Pythagoreer* (Halle, 1923), pp. 184 ff., still hold: there is no reliable evidence to connect the

discovery of the sphericity of the earth with any of the pre-Socratics, not excluding Parmenides, whose horizontally oriented zones were later falsely identified with the global zones as inscribed by Aristotle and his followers; cf. W. A. Heidel, *The Frame of the Ancient Greek Maps* (New York, 1937) and the same author's *The Heroic Age of Science* (Baltimore, 1933), p. 98. R. Mondolfo, in *Rend. R. Accad. d. Scienze dell' Istituto di Bologna, Scienze Morali* ser. 3, vol. x (1937), pp. 79 ff., tries to revive the ascription to Parmenides, but he relies too much on the Hippocratic *περί ἐπιδουμάδων* whose date and provenance are very dubious.

translation of the relevant passages Plato's reliance upon popular, i.e. old-fashioned, scientific preconceptions will become evident.

- 111 c This is the nature of the earth as a whole, and of its surface.¹ There are many areas² on the earth, in the hollows which mark its surface all round, some deeper and wider than the hollow in which we live, others deeper but with a lesser expanse than our area, others again shallower
d than ours but broader. All these hollows have underground channels connecting them with each other at many places, some narrower some wider; and they have outlets through which much water flows, from hollow to hollow, as into mixing bowls. There are also in the earth huge masses of ever-flowing rivers, carrying both hot and cold water, and also much fire and great rivers of fire, and many rivers of wet mud,
e some thicker than others, like the rivers of mud which in Sicily precede the lava, and also lava. All these fill the areas into which they happen to flow in their course.

Now there is something like a see-saw within the earth which moves all this up and down. This see-saw operates roughly as follows. One of
112 a the underground cavities is the largest of them all. This means that it cuts right through the whole of the earth.³ This is what Homer had in mind when he said of it:

... far off, where is the lowest pit below the earth ...

¹ Throughout the present passage the preposition *περί* is horizontally directed. Here it refers to the circular expanse of the earth's surface. The area embraced need not of course, be strictly circular; cf. the rectangular walls of Babylon, Herodotus 1. 179: *πέριξ τοῦ τείχους*. Better yet, cf. *Critias* 118 d.

² For the most part, *τόποι* equals *κοίλα*. In other words, the areas, inhabited or uninhabited, each of them at least potentially an *οἰκουμένη*, which make up the vast earth, are usually coextensive with the *κοίλα*; cf. 109 b 4-5. In a later passage, however, 112 c 6, d 1, *τόποι* seems to refer to a subdivision of our *κοίλον*. The reason for this lack of precision may be explained as follows. When Plato talks about the earth, he has in mind either the vast horizontally oriented expanse, with its numerous *κοίλα* (let us call this: image I), or our particular *κοίλον* (image II), or a mixture of the two, a horizontal plain sloping downward towards the middle, but divided into zones (image III); for the last, cf. Xenophanes A 41 a Diels = Aëtius 2. 24. 9: *κατὰ κλίματα τῆς γῆς καὶ ἀποτομὰς καὶ ζώνας*. Also Parmenides A 44 a Diels, especially Aët. 3. 11. 4 where we find a similar use of *τόποι*. It is this mixed image which is responsible for the location of several *τόποι* in what appears to be one *κοίλον*. What I have called Plato's lack of precision seems to be connected with a similar multiple reference in earlier scientific writing. In their remarks about *γῆ*, the pre-Socratics were as

likely to have in mind the cartographical arrangement of the *οἰκουμένη* (*τῆς περιόδου*) as the theoretical shape of the body of the earth (Xenophanes B 28 Diels), or again the characteristics of the element *γῆ* as contrasted with *αἰθήρ* and *ἕδωρ* (Empedocles B 37; 39).

³ The central cavity runs parallel to the lesser channels, i.e. horizontally. But instead of merely connecting one hollow with another (image I) it runs below all of the hollows, from one end of the earth to the other. According to the usual interpretation (cf. most recently R. S. Bluck, *Phaedo* (London, 1955), p. 135) Tartarus cuts through the centre of a globular earth, running roughly north to south along the axis of the sphere. But Tartarus, which in Homer and popular myth is regarded as a horizontally oriented space below the earth, would be an awkward name for such a monstrosity, and Plato would not go out of his way to cite the reference if his cavity were entirely different from that of Hesiod and Homer. Even Aristotle, who misunderstands Plato's purpose and tries to fit the account into his own spherical scheme (*meteor.* 2. 2. 355 b 32 ff.), seems to think of the central chasm and its see-saw along vaguely horizontal lines; the verb he chooses, *εἰλεῖσθαι*, whatever its significance, has centripetal force, and is thus not suitable to designate linear extension. The confusion has been further compounded by a comparison with *Timaeus* 40 b-c where Plato does refer to an

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- Elsewhere he calls it Tartarus, and so do many other poets. Into this cavity all rivers flow, and from it they again spring forth, and each of them adopts the character of the soil through which it flows. The
 b reason why all the streams are always flowing in and out is that the fluid has no fixed foundation or resting place.¹ It swings and surges up and down, and the enveloping wind and air do the same. Whether the liquid flows to the region beyond or to our own region,² the wind follows along. Just as in the act of respiration the air is always in process of exhalation and inhalation, so the wind swinging in and out with the liquid produces terrible, irresistible blasts. Now when the water has
 c made its way into what we call the lower area,³ then the floods start to flow through the earth into the regions beyond and fill them up as if by pumping. And again when the water subsides there and starts to travel in this direction, it fills our regions, and when the amount is full the water flows through the watercourses and through the earth and finds its way to the several places of destination and thus produces seas and lakes and rivers and springs. From there the floods again seep down
 d through the earth, some of them after circling around large areas and many lands, others after visiting only a few places and those not so much extended.⁴ Finally they once more fall into Tartarus, some at a place much lower than where they had been pumped up, others only a little lower; but all enter the earth on a level below their source.⁵ Sometimes the source is at a point opposite to the spot where the water flows in again, sometimes they are on the same side.⁶ Some streams go all the

axis, and Taylor, in his commentary p. 234, note 2, proposes to substitute ἔλλεσθαι, the verb of the *Timaeus* passage, for Aristotle's εἰλεῖσθαι. Thus Aristotle's vagueness has become responsible for a notorious problem of interpretation; cf. F. M. Cornford, *Plato's Cosmology* (London, 1937), p. 122. Later writers follow Aristotle in imposing a spherical perspective, until in Dante Hell becomes a funnel, and the rivers are located one above the other, whereas in Plato, as will appear below, all four rivers lie on the same level.

¹ πυθμῆν and βάσις here do not refer to Tartarus, in spite of Pindar fr. 207 Snell *et al.*, but to the fluid. The words are almost synonymous, denoting here not 'bottom' but 'fixed position'. For βάσις see Plato, *Cratylus* 437 a where it is contrasted with φορά. For πυθμῆν cf. Aeschylus, *Prom.* 1046: χθόνα δ' ἐκ πυθμῆνων . . . κραδαίνουσι, also Solon 1. 20 Diehl.

² εἰς τὸ ἐπ' ἐκεῖνα τῆς γῆς . . . καὶ . . . εἰς τὸ ἐπὶ τάδε: the underlying conception is image I. 'The region beyond' refers comprehensively to other hollows, divided from τὸ ἐπὶ τάδε, our own hollow, by what Plato had earlier called the 'true earth': 110 a 1, 8 ff. Both the 'true earth' and the hollows outside of our own particular hollow are situated ἐκεῖ. There are, of course, no rivers of any kind on the true earth; cf. 110 c 7: ὕδατος τε

καὶ αἰέρος ἐκπέλα ὄντα. That this deprives the men who have lived exceptionally well (114 b 6-c 2) of a means of transportation does not seem to have bothered Plato.

³ The particle δὴ indicates, with self-conscious emphasis, that our region has earlier been shown to rest at the bottom of a κοῖλον; cf. 109 c ff. I am inclined to think that τὰ βεύματα is an interpolation, though I have retained it in the translation. It duplicates τὸ ὕδωρ of 112 c 1. If I am right, the plural noun was added to create an antecedent for οἱ ἐπαντλοῦντες and perhaps also for τὰ δὲ πληρωθέντα of c 5. διά stands and falls with τὰ βεύματα. My colleague Prof. John B. McDiarmid suggests that the original reading of c 2-3 may have been: εἰς (for τοῖς) τὰ κατ' ἐκεῖνα βεύματα διὰ τῆς γῆς . . .

⁴ This use of τόποι, like the one before at 112 c 6, is based on image III; cf. p. 194, note 2.

⁵ Throughout this translation the term 'source' designates the point on the earth's surface where a river emerges from the soil. This, rather than emergence from Tartarus, is the natural meaning of the term ἐκροή and its equivalents. Within a κοῖλον the ground slopes down toward the middle; this explains the sense of ὑποκάτω.

⁶ καταντικρύ and κατὰ τὸ αὐτὸ μέρος are terms referable to image III. καταντικρύ

way round in a circle,¹ winding round the earth like snakes either once or several times, and they flow down² as far as they can before they fall back into Tartarus. From either side the rivers can flow only as far as the centre and no farther, for if they continued to the other side they would have to flow upward.

There are many large streams of different shapes and kinds. Among them, four are of special importance. The largest of them, describing the biggest circle, is the one we call Oceanus. Opposite it,³ and flowing in the opposite direction, is Acheron. It runs through many uninhabited areas, and in the end, after flowing underground, empties into the Acherusian lake. . . . The third of the rivers has its source between⁴ the other two; near its source it flows into a large area burning with a great fire, and forms a lake much larger than our sea here, seething with water and mud. From there it flows in a circle, violent and muddy, and in its windings about the earth⁵ it comes, among other places, also to the edge of the Acherusian lake, without, however, coming in contact with the water of the lake. Finally, after many convolutions under the earth, it flows farther down and falls back into Tartarus.⁶ This is the river which they call Pyriphlegethon; it carries lava which produces eruptions at various points on the earth's surface. Opposite from it are the springs of the fourth river. The first area it hits is terrible and fierce, we are told, all steel-blue in colour. This area is called the Stygian plain, and the lake formed by the river is called Styx. After flowing into the lake and absorbing its terrible properties, it sinks below the earth, and winding along with a course counter to that of Pyriphlegethon, it

points to the land on the other side of the Mediterranean which cuts the horizontal land mass into a northern and a southern half, or to the other side of the torrid equatorial zone. Cf. Thucydides I. 136 ἡ ἡπειρος ἡ καταντικρὺ for a similar perspective, on a reduced scale. Burnet brackets *εἰσρεῖ*; with Robin, I see no reason for the deletion.

¹ i.e. within the κοῖλον.

² i.e. down the slope of the κοῖλον.

³ Here καταντικρὺ, in combination with δι' ἐρήμων τε τόπων 112 c 6, seems to point to image I. Oceanus surrounds our οἰκουμένη. If we assume that our οἰκουμένη lies towards the north of the vast disc-earth (Olympiodorus in *Platonis Phaedonem* C III, p. 202, 12 Norvin, seems to preserve an ancient tradition to this effect; cf. also D p. 241, 5 where a misunderstanding of Plato's arrangement causes the commentator some embarrassment), then Acheron controls an area to the south, from where it flows northward to the centre of the disc where, below the surface, it forms the Acherusian lake.

⁴ κατὰ τὸ μέσον, equidistant from the other two, i.e. according to Olympiodorus, east. The rivers, then, divide the earth of image I into four geographical sectors, or quarters, each controlled by its river, which at one point in the course of its meanderings

flows close to the Acherusian lake. The four rivers together form a virtual network of waterways, surface and underground, for the whole earth. The location of the lakes created by Pyriphlegethon and Cocytus indicates that, at least part of the time, the sinners carried along in these rivers find themselves on the surface of the earth. Uninhabitable regions, far away from our οἰκουμένη, are thus drawn into Plato's eschatological scheme. (It is to be understood that this arrangement, with the Acherusian lake at the centre of the map, is only one of several likely dispositions.)

⁵ περιελιπτόμενος δὲ τῇ γῇ is a non-committal term, comprehending movement both above and below the ground. Burnet's note ad loc. and Bluck's translation are needlessly specific. Cf. *Phaedrus* 257 a.

⁶ I do not understand κατωτέρω τοῦ Ταράρου. The traditional translation, 'at a lower point of Tartarus', cannot be right, in spite of Schwyzler-Debrunner, vol. II (Munich, 1950), p. 114. Properly speaking it should be 'lower than Tartarus'; cf. Herodotus 8. 132. 3: κατωτέρω Δήλου, 'beyond Delos'; also Aristophanes, *Frogs* 70. I suspect that τοῦ Ταράρου is corrupt. Meanwhile I have translated it as if it were a genitive of sphere, i.e. as if = τῷ Ταράρῳ.

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encounters that river at the Acherusian lake, coming from the opposite direction. But again, it too does not make contact with any of the other waters, but goes on winding about until it falls back into Tartarus, facing away from Pyriphlegethon. The name of this river, according to the poets, is Cocytus.

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THOMAS G. ROSENMEYER

THE PROSODY OF GREEK PROPER NAMES— A REPLY

PROFESSOR SKUTSCH has convicted me of one error—the inclusion of *Eun.* 465 in my list on p. 208. I do not feel, however, that he has *proved* that *Phaedria* (nom. or voc.) is a dactyl in Terence. The essence of his argument, as I see it, depends on the figures in the last two rows of the first two columns on p. 90, and may be stated as follows: 'Forms undeniably dactylic, such as *Pamphile*, are always followed by a disyllabic thesis. The thesis after all critical examples of *Phaedria* is disyllabic. Therefore "*Phaedria* is proved to be a dactyl".' My objection to this argument is not that it is not a logical syllogism, but that it seeks to establish the prosody of *Phaedria* (3 examples only) without considering the prosody of the other *Phaedria*-type¹ names in Terence. These are listed on p. 208 of my article (but omitting *Eun.* 465). The following cases, I suggest, merit consideration:

Ht. 406. *Clinia* is certainly cretic (followed by monosyllabic thesis).

Ht. 688. The thesis is disyllabic, but I have suggested (p. 209 line 14) an independent reason for regarding *Clinia* as cretic rather than dactylic.

Ht. 695. Lindsay (O.C.T.) and Laidlaw (*The Prosody of Terence*) regard the thesis (unemphatic *tū*, with synizesis) as monosyllabic. Skutsch may regard it as disyllabic: I incline to follow Lindsay.

Eun. 707. Lindsay takes the thesis as monosyllabic *tūam*.

Phorm. 784. The thesis is disyllabic, but cf. Laidlaw (op. cit., p. 85) '*Nausistratā fāc || illa* etc., would be very awkward'.

Hec. 243. Lindsay scans the thesis *mēum* as monosyllabic; since *meum* may be emphatic (in which case Lindsay would scan it as a disyllable), I do not regard it as a strong case.

Hec. 830. The succeeding thesis is monosyllabic.

There are, then, six or seven cases (out of a total of seventeen) where *either* the succeeding thesis is monosyllabic *or* other grounds exist for preferring the cretic scansion. This is surely evidence enough that *Phaedria*-type names in Terence do *not* behave like *Pamphile*?

I do not claim, on the other hand, that the nom. and voc. of *Phaedria*-type names behave exactly as *Parmeno* or oblique cases of *Phaedria*—had they done so, there would have been no problem. The choice between Skutsch's view and mine has, therefore, to be made on some more general ground. Skutsch asks us to believe (a) that Terence's practice differs from that of Plautus, but (b) that in some cases Terence reverts to Plautine prosody. I am quite willing to believe (a), but I am dubious about believing *both* (a) *and* (b) together. My own suggestion—which I did not claim to have proved, but advanced as the 'simplest hypothesis'—covers all examples, both lyric and non-lyric, in both Plautus and Terence, and does not require us to admit any exceptions. Professor Skutsch may be right, but he has not convinced me yet.

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¹ I include *Nausistrata* and *Philumena*, and long propenult: their exclusion would since, like *Phaedria*, they have short penult not invalidate my argument.

THE TEXT OF HESIOD'S *THEOGONY* AND THE HITTITE *EPIC OF KUMARBI*¹

HESIOD is among the most difficult Greek poets for problems of text. This is especially true in the case of the *Theogony*. Today we consider an over-scrupulous analysis of the logical consistency of a text a characteristic of nineteenth-century pedantry. Yet such latitude is not always allowed the *Theogony*. It was only twenty-five years ago that there appeared the most ruthless survey of its contents. This was Jacoby's edition of 1930, when only a mutilated remnant of the surviving text was left the original poet; the rest was added by a whole series of subsequent rhapsodes. Hesiod received very much the same treatment four years later from Schwenn. Recently, however, two developments have gone a long way towards the defence of passages excluded by scholars from what they think the authentic text of Hesiod's *Theogony*. Many single lines or groups of verses have been bracketed by the editors of Hesiod, since they reproduce some other part of the poem in a similar or even identical form. The researches of the Dutch scholar Otterlo have now revealed that the fault is rather that of these editors. When they stigmatize the passages with the description of aimless repetition, they fail to appreciate what Otterlo claims as an inherent principle of oral recitation, or literature derived from an oral prototype. Otterlo's term for what would be an essential feature of this literature is ring-composition.² A rhapsode provides a loose unity for his poem by repeating at the conclusion to the sections of the poem the verses which also introduced them. These repetitive verses announce the beginning and then the end of each section. We are wrong if we think that they have only been transferred from their original place in the poem to some later passage because there has been a lack of proper care in the process of transmission. Certainly this repetition is no adequate reason for us to suppose their occurrence a second time in our text spurious.

It has not only been verses repeated in our text which critics would deny Hesiod. They have also rejected complete episodes from the *Theogony*. The battle between Zeus and Typhoeus, for example, represents the most suspect part of a poem, where critics allow little to escape at least some mild censure. The list of scholars who have expelled this passage because they believe it interpolated in the original text is an impressive one. It includes Aly, Mazon, Wilamowitz, Jacoby, Schwenn, Solmsen, and Worms.³ Many of the arguments they have used to buttress this theory are trivial. An initial difficulty has been the presence of Gaea at verse 821 as the mother of Typhoeus. They claim that elsewhere in the poem the goddess is made the ally of Zeus

¹ The author would like to express his sincere thanks for much valuable criticism to Professor T. B. L. Webster of University College, London, who read the article in typescript.

² W. A. A. Otterlo, *De Ringcompositie als Opbouwprincipe in de epische Gedichten van Homerus*.

³ W. Aly, *Hesiods Theogonie*, pp. xvii and

52; P. Mazon, *Hésiode*, pp. 15-16; U. von Wilamowitz, *Hesiodos Erga*, pp. 112 and 131; F. Jacoby, *Hesiodi Carmina, Pars 1, Theogonia*, pp. 19-21; F. Schwenn, *Die Theogonie des Hesiodos*, pp. 41-45; F. Solmsen, *Hesiod and Aeschylus*, p. 53 n. 172; and F. Worms, *Hermes*, lxxxi (1953), 29 ff. Cf. M. H. A. L. H. van der Valk, *Mnemosyne*, iv, vi (1953), 279-82.

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(thus verses 626 and 884). Yet there is absolutely no evidence why we must assume that she was an enemy of Zeus anywhere in this episode. The choice of this particular goddess as the parent of Typhoeus is obviously conditioned by the pattern already set for her in the poem as the mother of the Cyclopes and Centomani (verses 139 and 147 ff.).

This final triumph of Zeus recalls examples of battles known from the literature of the ancient Near East, where the struggle between a god and a kind of dragon symbolizes the defeat of the old year by the new.¹ In the light of these analogies it does not seem unlikely that an ultimate origin for the battle in the *Theogony* should be sought in ritual combat performed at a new year festival.² This suggests that our episode is really very old. A recognition of its great antiquity is a first step towards the belief that this part of the *Theogony* was in fact composed by Hesiod. The conjecture seemed brilliantly confirmed by a second discovery, which we shall find relevant to our study of the text of Hesiod. This was the identification of a close coincidence between the contents of the *Theogony* and the Hittite *Epic of Kumarbi* and *Song of Ullikummi*.³ The correspondence need hardly surprise us. Parallels can be profitably developed between the epic poetry of the Near East and Homer.⁴ A use of analogy with eastern literature for Hesiod should not be restricted to the *Theogony*. It is probable that a pattern for the basic situation in the *Works and Days* must be located in didactic literature which circulated in the countries of the Near East.⁵ There, however, advice is addressed by a father to his recalcitrant son. The actual existence of a brother, Perses, explains Hesiod's variation on a standard pattern. The degree of coincidence between the *Theogony* and its two related Hittite myths was so marked as to imply a strong possibility of imitation. It seemed reasonable to conclude that they had supplied Hesiod with the idea for the scheme of his poem. Of course it is quite impossible for us to say in what form Hesiod may have known them. The scheme in Hesiod would be represented by his dynasties of the gods, war between Zeus and the Titans, and the last struggle against Typhoeus. This final battle parallels the Storm-god's fight with the stone monster Ullikummi. The Greek poet did not adhere slavishly to his eastern source. The Hittite legend of Kumarbi has four generations of the gods, but Hesiod only the three, Uranus, Cronus, and Zeus. Hesiod, then, was obliged to modify this material in whatever form it was available to him. In this case presumably it would be a concession to beliefs about the Greek gods already popularized by epic poetry.⁶

¹ A list is given by T. H. Gaster, *Thespis*, pp. 140 ff.

² F. Dornseiff, *L'Antiquité Classique*, vi (1937), 254 ff.; F. M. Cornford, *The Unwritten Philosophy*, pp. 104 ff., and *Principium Sapientiae*, pp. 218-20; G. Thomson, *J.H.S.* lxxiii (1953), 77-78; and G. Murray, *J.H.S.* lxxiv (1954), 52-53.

³ Both are translated into English by A. Goetze in J. B. Pritchard's *Ancient Near Eastern Texts relating to the Old Testament*, pp. 120 ff. The latest edition of the Kumarbi epic is that by P. Meriggi, *Athenaeum*, xxxi (1953), 101 ff., while H. G. Gueterbock treats the other exhaustively in *Journal of Cuneiform Studies*, v (1951), 135 ff., and vi (1952), 8 ff. Their relation to Hesiod is dis-

cussed by Dornseiff, op. cit., pp. 246 ff.; R. D. Barnett, *J.H.S.* lxxv (1945), 100-1; Gueterbock, *A.J.A.* lii (1948), 123 ff.; and A. Lesky, *Saeculum*, vi. i. 38 ff.

⁴ C. H. Gordon, *Introduction to Old Testament Times*, pp. 89-99, and *Rivista degli Studi Orientali*, xxix (1954), 161-9; F. Dirlmeier, *Rh. Mus.* xcvi (1955), 18-37.

⁵ Dornseiff, *Philologus*, lxxxix (1934), 397 ff. A selection of texts of this type is included in the collection by Pritchard, op. cit., pp. 412 ff.

⁶ Wilamowitz, op. cit., p. 155; W. Schadewalt, *Iliasstudien*, p. 118; and P. Philippson, *Thessalische Mythologie*, pp. 107 ff. Cf. Solmsen, op. cit., pp. 20 ff.

Attempts to justify the Hesiodic composition of the story of Typhoeus by a comparison with the *Song of Ullikummi* have been too optimistic.¹ Gueterbock has identified two essential similarities between the Greek and Hittite stories. Both versions occupy the same general position in the narrative. They represent a last effort to regain a lost throne. In both traditions the decisive battle is fought at Mount Hazzi. This second point of contact has been recovered, however, not from Hesiod, but from the account of the battle preserved for us by Apollodorus, who makes the first clash between Zeus and Typhon occur at that place, the classical Mons Casius. All we learn from Hesiod is that Typhoeus consorted with Echidna, who lived beneath the ground 'among the Arimi' (verse 304). Otherwise there are no similarities between the *Song of Ullikummi* and Hesiod's story of Typhoeus.

Ullikummi was able to defeat the first attack of the Storm-god. Ea, however, using the saw with which Heaven had been originally severed from Earth, 'cut off under the feet of the monster so as to destroy its great power'. The end of the Hittite story is lost, but presumably showed the Storm-god victorious. None of this can be paralleled in Hesiod. The version of the story preserved by Apollodorus is very similar.² According to this account the weapons used by Zeus were thunderbolts at a distance, but a sickle for work at close range. Typhon was pursued by Zeus as far as Mount Casius. The story does not close at this point. The monster was able to get the sickle away from Zeus, and used it to cut through the sinews of the god's hands and feet. These had to be retrieved by Hermes and Aegipan before Zeus could complete the destruction of Typhon. Even then Typhon was also deceived by the Fates, who persuaded him to eat what Apollodorus mysteriously refers to as 'the ephemeral fruits' in the mistaken belief that they would be the source of fresh strength.

Nothing survives from the *Song of Ullikummi* to compare with the end given the story by Apollodorus. Before the discovery of this myth, the loss of his sinews by Zeus in Apollodorus had been compared to an identical situation in another Hittite story, that of the fight between the Storm-god and the dragon Illuyankas.³ In this legend Illuyankas beats the Storm-god, and takes away his heart and eyes. They were only recovered when the Storm-god had produced a son by a mortal woman, who could demand the organs as a dowry for his marriage to the daughter of Illuyankas. We have a second version of the story preserved on the same tablet. Here once again the Storm-god is at first defeated. The dragon and his children were trapped, however, by the goddess Inaras and Hupasiyas. These two gave the god's enemies so much to eat and drink that they were incapable of returning to their lair. It is perhaps not impossible to compare this alternative version of the story of Illuyankas with Apollodorus' enigmatic reference to the ephemeral fruits presented to Typhon by the Fates.

Two parallels to the story of Typhon in Apollodorus have been noted. Neither unfortunately clarifies the issue. In Nonnus' *Dionysiaca* Cadmus tells Typhon that the strings of his lyre were destroyed by Zeus after he had competed in a musical contest against Apollo, and had had the presumption to win (I, verses 486 ff.). He then obtains the sinews of Zeus from the monster as a

¹ Lesky, *Anz. Öst. Akad. d. Wiss.*, 1950, pp. 146-7. Cf. U. Hölscher, *Hermes*, lxxxix (1953), 392, n. 2.

² Apollodorus, I. 6. 3.

³ W. Porzig, *Kleinasiatische Forschungen*, 1930, pp. 379 ff. The myth is translated by Goetze in Pritchard, op. cit., pp. 125-6, and by Gaster, *Thespis*, pp. 325 ff.

replacement. Our second parallel is from Plutarch, who simply states that there was a statue of Horus at Coptus, where the god holds in one hand the genitals of Typhon. Apparently there was also a story current that Hermes had taken away the sinews, this time of Typhon, and used them for strings (*de Is.* 55).

The story of Typhon known to Apollodorus would seem to be a conflation of details otherwise present in the Hittite *Song of Ullikummi* and the two versions of the battle between the Storm-god and the dragon Illuyankas. The idea of a loss of sinews also appears to be present in Plutarch, and then considerably later in Nonnus. Our major difficulty in trying to relate these scattered sources is the great time gap between them. In the case of the Hittite myths and Nonnus this would be as much as 2,000 years. We shall start nevertheless with Nonnus in the fifth century A.D.

What do we know about the sources for Nonnus' *Dionysiaca*, which may have some bearing upon our problem of the relation between Hesiod and these Hittite myths? Eissfeldt has argued for Phoenician legend as the basis of books 40-43 of the *Dionysiaca*.¹ In these books Dionysus reaches Tyre, and clashes with Poseidon over their mutual passion for Beroe. The whole of the forty-third book is taken up with the resulting battle between the two gods. According to Eissfeldt this battle belongs to a standard type of contest between heaven and the sea, which he can otherwise illustrate with a text found at Ras Shamra.² This type of contest is known again from the extract of the Phoenician history by Philo of Byblus, quoted by Eusebius.³ In this we are told that Uranus and his ally Demarus attacked Pontus. The assault by Demarus was defeated, while Uranus ended up by being castrated by Cronus. Although Philo himself dates from the first century after Christ, his source was apparently very much older. His authority was a history by a certain Sanchuniathon. This historian would seem to have had access to temple archives. Eusebius also quotes Porphyrius on Sanchuniathon and Philo. From this we learn that Sanchuniathon was a native of Beirut, used a priest named Hierombalus for his information, and submitted his history to the examination of Abibalus, king of Beirut, and his experts. It was possible for Porphyrius to calculate from the Phoenician king-list that all this had taken place before the time of the Trojan war.

The source for Philo's history is undoubtedly very old. Names, similar to those preserved by Philo, occur on the tablets which the French have excavated at Ras Shamra. Critics were then prepared to admit the reality of Sanchuniathon's existence, though few would press for a date before the Trojan war, near the time of Moses, or during the reign of Queen Semiramis, all of which would presumably give Sanchuniathon a *floruit* before the twelfth century. Albright has based his arguments upon the form of the name Sanchuniathon. The American has been consistently lowering his date for Sanchuniathon over the past eighteen years, and his latest published opinion is that he should be placed between 700 and 500 B.C.⁴ On the other hand, Eissfeldt has always felt

¹ O. Eissfeldt, 'Ras Schamra und Sanchuniathon (*Beiträge zur Religionsgeschichte des Altertums IV*)', pp. 64, 112 ff., and 128 ff.

² Pritchard, *op. cit.*, pp. 130-1.

³ The best edition of Philo is still C. Müller, *Fragmenta Historicorum Graecorum*, iii. 563 ff. There is also a new version with a German translation of the fragments by C. Clemens,

'Die phönikische Religion nach Philo von Byblos' (*Mitteilungen der vorderasiatisch-ägyptischen Gesellschaft*, xlii. 3), pp. 16 ff.

⁴ W. F. Albright, *Bulletin of the American Schools of Oriental Research*, lxx (1938), 24; *From Stone Age to Christianity*, pp. 240 ff.; *Archaeology and the Religion of Israel*, pp. 69-71.

a considerable sympathy for the early date of Sanchuniathon.¹ He has been hard pressed until recently, however, to support the statements made by Porphyrius about Philo's source, which after all we only know through the third-hand report of Eusebius. Now the matter seems to have been finally settled in favour of an early Sanchuniathon. We have preserved a colophon attached to a poem from Ras Shamra about Baal, where there appears to be indicated exactly the same relation between author, teacher, and patron that Porphyrius claims for Sanchuniathon, Hierombalus, and Abibalus.² Porphyrius knows what is an undoubtedly old colophon. Why then should we not admit that Philo translated into Greek some text very much like those preserved for us at Ras Shamra? Sanchuniathon could very easily then have been alive before the date of the Trojan war.

Only a little of Philo's *History* has been kept for us by Eusebius. In it we find first a short cosmogony, a zoogony, a suggested origin for certain gods, and finally the story of the dynasties in heaven, Eißfeldt's *Uraniden-Geschichte*. Hypsistus and Beruth in the first generation had as their children Uranus and Ge. They in turn gave birth to El-Cronus, Baetylus, Dagon, and Atlas. Ge quarrelled with Uranus over the god's excessive offspring by other marriages. Uranus then attempted to kill their children. He was resisted by Ge, and next Cronus and his scribe Hermes took up arms against Uranus. The preparation of a sickle and spear from iron provided Cronus with a weapon. His allies, aroused by Hermes, were able to drive Uranus from his throne. Cronus gave his father's already pregnant concubine to Dagon as his wife. She bore a child named Demarus. At last, in the thirty-second year of his reign, Cronus ambushed and emasculated Uranus, the blood from whose wound flowed away into the neighbouring springs and streams.

There are obvious parallels between this version by Philo and the Kumarbi myth.³ Philo has four generations of the gods like the Hittite story. Hesiod of course is restricted to three. Cronus is equated with El, a god whom we know from another text at Ras Shamra was identified with Kumarbi. Demarus was conceived by Uranus, but born to Dagon. His birth is not unlike that of the Hittite Storm-god, who was reproduced from the genitals of Anu, but qualifies as a son of Kumarbi. The drops of blood, which fell from the severed organs of Uranus, suggest Hesiod's description in the *Theogony* of the birth of Aphrodite (verses 188 ff.). A ceremony was performed, probably in spring, at the sanctuary of Astarte in Philo's home town of Byblus. The red earth washed down from the mountains into the River Adonis at that season gave its waters the colour of blood. There was a popular belief that this was the blood of Adonis, slain each year by the boar on Mount Lebanon.⁴ Perhaps this was partially the source for the corresponding event in Philo. Other comparisons between Philo and the *Theogony* include the idea of Ge as the ally of Cronus against Uranus, the *harpe* motive, and castration of Uranus.

Our problem with Apollodorus was to explain exactly how versions of the Hittite myths, to which he is clearly indebted for the details of his fight between Zeus and Typhon, were transmitted over such a space of time. The answer

¹ Eißfeldt, *op. cit.*, pp. 67-71. Cf. Clemen, *op. cit.*, p. 77.

² Pritchard, *op. cit.*, p. 141. See Eißfeldt, 'Sanchuniaton von Berut und Ilumilku von Ugarit' (*Beiträge zur Religionsgeschichte des*

Altentums v), pp. 47 ff., 58-59, and 68-69.

³ Gueterbock, *A.J.A.* lii (1948), 133; Hölscher, *Hermes*, lxxxi (1953), 391 ff.

⁴ J. G. Frazer, *Adonis, Attis, Osiris*, i. 225.

seems supplied by Philo, who in the first century A.D. translated into Greek a very much older work by a scribe at Beirut. Presumably this is not an isolated example. At the same time Philo also knows his *Theogony*.

So far we have been content with the elucidation of Apollodorus from our Hittite sources. The reverse process should be equally valid. If we have no analogy in Greek tradition for some detail in Apollodorus, it is reasonable to suspect a Hittite source. Apollodorus tells us that after Zeus had been safely reared he took Metis as his accomplice. The goddess gave Cronus a drug, which forced him to throw up first the stone substituted for Zeus, and then the children he had swallowed. Hesiod knows nothing about the part played by Metis. In the *Theogony* Cronus is made to deliver up his children through the guile of Gaea (verse 494). Kumarbi replaced Anu as king of the gods according to Hittite legend. He bit off and swallowed his father's genitals. The result was to impregnate Kumarbi with the River Tigris, Tasmisu, and his own eventual successor, the Storm-god. Anu mocked Kumarbi, who then vomited. It appears, however, that he was left with the Storm-god still very much inside him. The text here is too fragmentary to permit any reliable reconstruction of the Hittite story. Later Anu gives instructions to the Storm-god for his safe birth from inside Kumarbi, who a little afterwards receives something to eat. What this actually was our torn text does not allow us to say. However, in the end the Storm-god appears to have been safely delivered.

The gods produced from the genitals of Anu have been compared to the Erinyes, Giants, and Melian Nymphs in the corresponding story of Uranus told by Hesiod. The mysterious object, presented to Kumarbi for the god to eat, is referred to the stone which Gaea substituted for the infant Zeus. This is the weakest of the parallels which have been suggested between the Greek and Hittite stories.¹ The situations in the two stories are entirely different. At no time is Zeus inside Cronus. The stone is expressly given to Cronus by Gaea to prevent any possibility of this ever taking place. On the other hand, the Storm-god is certainly inside Kumarbi, and the problem here is rather how to get him out. What the sense of the plot requires is something like an abortion, which can release the Storm-god and get him out of Kumarbi. This is exactly what we have related by Apollodorus in the case of Metis. She gives Cronus a drug which removes the stone and the rest of his children. The situation is the same as in the Hittite story. The difficulty for Metis is not to stop Cronus from swallowing more of his children, but to release something already inside his stomach. The source for this incident in Apollodorus has been previously unknown. We have discussed earlier the evidence for a knowledge of the *Song of Ullikummi* by Apollodorus. We now have adequate reason for supposing that he was not unacquainted with its related Kumarbi myth.

The comparison, which has been made between Cronus and the stone, and what is given to Kumarbi to eat, is based upon insufficient evidence. It also gives a wrong sense for the interpretation of the story of Kumarbi. We want Kumarbi to swallow something, and next to bring it up again. We must turn back to the castration of Anu. Then Kumarbi certainly swallows his father's genitals, and spits them out later. Cronus castrates Uranus in the *Theogony*, but merely throws the genitals away (verses 180 ff.). An act of swallowing and then spitting out is told about different generations of the gods in the two stories. The episode is transferred from the generation of Anu and Kumarbi in the

¹ Lesky, *Saeculum*, vi. i. 42.

Hittite myth to the later one of Zeus in the *Theogony*.¹ This suggests the degree of modification which could occur in the details of the stories during the centuries they were transmitted. It also stresses what is of much greater importance for our problem of the text of the *Theogony*. This is the fundamental similarity between the two stories of usurpation in Hesiod. The stories are actually parallel, and their details coincide.² We may revert to the commencement of our study of the text of Hesiod, and revive the terminology of Otterlo. We could then say that these two parallel stories form one large compositional ring, which frames the whole of the first half of the poem after the introduction. In both stories the new king is the youngest son of the monarch who is displaced (verses 137 and 478). Uranus tried to conceal his children in the bowels of the earth (verses 156 ff.). There is a comparable act of suppression in the second story. Cronus, however, preferred his stomach as the place of concealment (verses 459 ff.). Two balanced speeches stand at the climax to the narration of both stories (verses 162-7 and 168-73, and 463-5 and 469 ff.). The two speeches of Uranus and Gaea in the second story are reported indirectly, but retain some of the careful antithesis characteristic of the speeches which formed the basis for the conspiracy against the power of Uranus (cf. verses 463 and 469-70, and 464-5 and 475-6). Both gods, who are in possession of sovereignty, are overthrown when Gaea prompts another act of concealment (verses 174 ff. and 477 ff.). A general epilogue supplies a conclusion to both stories (verses 207-10 and 501-6).

The epilogue to the story of Uranus and Cronus foreshadows the revenge which is to come to Cronus at the hands of Zeus. The second epilogue anticipates the description of the release of the Centomani by Zeus for his fight against the Titans. This battle is followed by the story of Typhoeus. We have seen that many critics reject this episode from the original *Theogony*. It has been more favourably received recently because of its general resemblance to the Hittite *Song of Ullikummi*. Mazon finds the closest parallel to Hesiod's story of Typhoeus in the passage from the *Titanomachia* which begins at verse 687. He believes that this is an interpolation in the *Titanomachia*. Schwenn thinks the greater number of these verses authentic. He restricts his comparisons to the two passages he believes added to the *Titanomachia*, verses 681-6 and 705-10. Jacoby acknowledges the extensive imitation of the *Titanomachia* made by the interpolator of the story of Typhoeus. All these critics invariably conclude that this apparent imitation is proof of the interpolation of the second battle. We have just seen that the two stories in the first half of the *Theogony* are really parallel. Can we now say that the same is true of the two battles which Zeus has to fight in order to consolidate his realm?

The *Titanomachia* opens with the release of Briareus, Cottus, and Gyes by Zeus (verses 617 ff.). Until then the war seems to have proved a very qualified success for both parties over the course of ten years. Once Zeus had won this new support the whole situation changed. The Titans were finally overpowered by the Centomani, who compelled them to take their own place in chains beneath the earth. The end of the compositional ring is marked by the complete reversal in the fortune of the Centomani, who become guardians where they had formerly been the prisoners (cf. verses 620 and 717, 618 and 718, and 619 and 719). Our other extract comprises a description of Typhoeus (verses 820-35), the details of his battle with Zeus (verses 836-68), and an

¹ O. R. Gurney, *The Hittites*, p. 191.

² Solmsen, op. cit., p. 26.

account of the origin of winds from the body of the monster, which includes verbal reminiscences of the description of Typhoeus' appearance (verses 869-80).

One feature of the stories of succession was the assistance given in both cases to the young god by Gaea. In the *Titanomachia* Zeus still had need of the help of the Centomani to defeat the Titans. At the same time he makes a significant contribution to the victory himself (verses 687 ff.). In spite of the protests of Mazon there is no inconsistency between the former inability of Zeus to defeat his enemies and his eventual triumph.¹ When the Centomani were released, Zeus was rewarded by the grant of thunder and lightning, which had previously been concealed in the earth (verses 504-5). It was these new weapons which the god used against the Titans. By the end of the *Theogony* Zeus can defeat Typhoeus without any outside support. He has now attained his full powers as king of the gods. Now that there is no longer any need for Zeus to turn to either Gaea or the Centomani for help, the structure of the episode has been modified. In the first story Gaea addresses Cronus, who pledges his support against his father (verses 164 ff.). Both Cronus and Rhea depend upon the advice of their parents at the time of the birth of Zeus (verses 463 ff.). In the *Titanomachia* we have the interchange between Zeus and Cottus (verses 644 ff.). There is no passage of direct or indirect speech in the story of Typhoeus. This suppression of any passage of dialogue destroys for the *Titanomachia* and the battle against Typhoeus the close parallelism which exists between the stories of the dynasties of the gods. Yet it still remains true that the two battles are in fact parallel, though the parallelism is mainly present on a verbal level. Before Typhoeus can effectively menace Zeus, the god can bring his thunderbolt into action, and the result, as in the *Titanomachia*, was to cause widespread devastation by fire (cf. verses 678-83 and 839-43, 850-2 and 858; 681 and 693-700, and 844-52). In both battles Zeus descends from Olympus against his opponent (cf. verses 687-93 and 707, and 853-5). Similes are used to express the noise of the one battle and the effect of the fire upon the earth in the other (verses 702-4 and 862-6). Finally Typhoeus suffers the same fate as the conquered Titans (cf. verses 717-18 and 868).

The parallelism, which we identified in the two stories of succession, also exists in the case of the *Titanomachia* and the story of Typhoeus. It is mainly, however, a verbal parallelism. The stories of succession were defined as the outer limits of a single large ring of composition. There now appears to be a correspondence in structure between the first and the second half of the *Theogony*. Each contains two dramatic episodes set round a less dynamic passage of description.

It is with Otterlo's principle of ring-composition that we are in possession of a new method for a valuation of the text of Hesiod. This need not confine itself to the defence of an occasional line, but can also be applied to the major divisions, which dictate the structure of a poem. The coincidence in structure we have just described for the *Theogony* demands the retention of the story of Typhoeus. It repeats the theme of battle in its own half of the poem, and forms a companion piece to the story of the birth of Zeus in the first part of the *Theogony*. The scheme of the structure of the *Theogony* has now become plain. At the climax of the poem stands the story of the clash between Zeus and Prometheus. We would expect Hesiod to have included some details about the

¹ Mazon, *Hésiode*, pp. 13-14. Cf. Wilamowitz, *Hermes*, lxiii (1928), pp. 369-71.

origin of mankind in the poem. It is illustrated by this preparation of the first woman. The story of Prometheus is preceded by the two stories of the struggle for the leadership among the gods. It is followed by the two battles in which Zeus defeats the Titans and Typhoeus. Our pattern comprises (1) introduction (verses 1-115), (2) struggle for succession (verses 116-506), (3) story of the sons of Iapetus (verses 507-616), (4) struggle for consolidation (verses 617-880), and (5) conclusion (verses 881 ff.). If we allow our text to stand as we possess it, the *Theogony* has a structure which can be clearly defined. When scholars stress the verbal parallels between the different parts of the poem, this is not evidence for the method of a stupid interpolator, but a use of repetition, which is characteristic of ring-composition. We can come to no other conclusion than that the *Theogony* comprises a self-contained unity. This was the opinion of Carl Robert fifty years ago,¹ and I can see no adequate reason why we should care to dispute his verdict today. We then have a poem whose structure we are able to appreciate. Jacoby gives us a shambles and a series of inferior rhapsodes. There is no doubt in my mind which alternative is the better.

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¹ C. Robert, *Mélanges Nicole*, pp. 461 ff.

THE Editors regret the occurrence of two errors in *C.Q.* VI (1956), p. 41, in Professor Guthrie's article on Anaximenes, for which the author is in no way responsible. The beginning of the second paragraph should read:

We are equally unfortunate in having no actual fragment of Empedocles' poem dealing with this point, but according to Aëtius again he believed . . .

The end of footnote one should be: Dreyer, *Planetary Systems* (Cambridge, 1906), 289.

THREE HISTORICAL PUZZLES IN *HISTORIES* 3

THE present paper proposes to discuss three passages in Tacitus, *Histories* 3 where current interpretations have led to difficulties which can be shown to be baseless so soon as it is realized that Tacitus is willing on occasion to sacrifice truth and clarity to stylistic effect. In each of these passages the same literary device lies at the root of the matter, a device which (for want of a better term) may be labelled 'the grouping of participles': the juxtaposition of participles in a sentence to the detriment of strict chronological order.

1. THE BRIDGE AT HOSTILIA

- Ch. 9. 1: *mox Caecina inter Hostiliam, uicum Veronensium, et paludes Tartari fluminis castra permuniit, tutus loco, cum terga flumine, latera obiectu paludis tegerentur . . .*
Ch. 14: (Vitelliani) *relictis castris, abrupto ponte Hostiliam rursus, inde Cremonam pergunt . . .*

In October A.D. 69 Caecina, together with the main portion of the Vitellian army, occupied a position north of Hostilia as if to hold the line of the River Po against the invading Flavian armies of Antonius Primus. Secretly, however, he negotiated an understanding with the latter, which, when revealed to his troops, caused them to arrest him and march quickly to join their fellow troops at Cremona.

Where was Caecina's camp? Since Mommsen's time, the answer of the commentators has been practically unanimous: it lay north of the River Tartarus, which here flows a mile or so north of the Po and very approximately parallel to it. The sentence quoted from ch. 14 tells us, as it appears, that the Vitellians broke camp, severed the bridge, and retreated to Hostilia and farther. Since Hostilia lies on the north bank of the Po and south of the Tartarus, the bridge must be that over the Tartarus, and the camp must have lain north of that river. Unfortunately Tacitus informs us no less clearly in ch. 9 that the camp lay between Hostilia and the swamps of the Tartarus. Which of these statements must we discount or explain away? The present writer thinks that the unequivocal words *inter Hostiliam . . . et paludes Tartari fluminis* mean what they seem to mean. And if it is not so, then we may despair of getting any sense out of Tacitus.

One assumption must first be granted. Though we lack precise evidence, it is obvious that there was a bridge over the Po at Hostilia. Both the road pattern of northern Italy and the strategy of A.D. 69 require it. The former shows that in its lower reaches the Po is crossed by main highways connecting Ravenna and Patavium, Mutina and Verona (via Hostilia), Regium Lepidum and Cremona or Mantua (via Brixellum and Bedriacum). In October 69 the Vitellian defence groups itself around these crossings. Ravenna is held by the fleet, its treachery soon to be revealed; Hostilia by Caecina; and Cremona by legions I Italica and XXI Rapax. Regular civilian and military traffic along these roads presupposes permanent bridges, and they seem significantly few. When we hear then of the breaking of a bridge near Hostilia, as we do at ch. 14,

it seems more natural to connect it with the wide and formidable barrier of the Po upon which Hostilia stands than with the swamps and ramifications of the little Tartarus. Supposing on the other hand that there was, incredibly, no bridge at Hostilia, then surely the obstacle presented by the Po was so considerable that a demolition on the Tartarus could make little difference either way.

Now Mommsen himself showed that after Caecina's arrest, his troops, in order to rejoin their companions at Cremona, took a route that lay south of the Po. His reasons are sound. The Hostilia legions arrived at Cremona on the evening of a day during which two things had happened: they themselves had marched 30 m.p. and Antonius Primus, having previously advanced from Verona, and encamped at Bedriacum, had fought a scattered cavalry engagement along the Via Postumia, 4-14 m.p. east of Cremona.¹ Mommsen pointed out that the new arrival is first known to Antonius from the information of captured townsmen of Cremona, which implies that the relieving force had come from south or west; in any case, the main highway from the east, the Via Postumia, in part identical with the road from Brixellum, was already occupied by the Flavian forces; and even if the Vitellians had marched by minor roads between the Via Postumia and the Po, they must still have been involved in the fighting along the nearby highway. Nor indeed is it likely that the frightened troops, without their normal commanders and fearful of other instances of the treachery so unsuspectingly revealed, would have been keen on venturing on the risky route Hostilia-Mantua-Cremona or Hostilia-Brixellum-Cremona. They knew that the enemy were at Verona, and their whole purpose was to unite their forces before a general engagement.²

These arguments must be accepted. In the course of the same discussion, Mommsen advanced the view we have condemned above. But his words³ show that he was uneasy about it: 'Wenn Tacitus sagt 3, 14: *relictis castris, abrupto ponte Hostilium rursus, inde Cremonam pergunt*, so kann hier nach der Folge nur gedacht sein an die Brücke über den Tartarus, nicht an die Pobrücke bei Hostilia, wenn es überhaupt eine solche gab. Vgl. 3, 9: *Caecina inter Hostilium et paludes Tartari fluminis castra permuniit, tutus loco, cum terga flumine, latera obiectu paludis tegerentur*, wo *flumen* auch nur der Tartarus sein kann. Ob die seltsame "Deckung" dieses dem Feind gegenüber geschlagenen Lagers durch einen hinter demselben fließenden Bach vor militärischen Augen bestehen kann, ist eine andere Frage.' Mommsen's view of Tacitus as a military historian permitted him to imagine that no nonsense was too bad to be attributed to our author; but while one may pardonably express irritation at certain military passages of the *Annals*, the position is very different with *Histories* 3, where better sources are employed to tell a much more detailed story. However, Mommsen's view has been accepted by Fyfe, Goelzer, Heraeus, Ramsay, Spooner, Wolff-Andresen, and Woodhouse; and only Nischer and Dessau have disagreed.⁴

¹ 3. 21. 1; 15. 2; 18. 1.

² 'Die zwei Schlachten von Bedriacum im J. 69', *Hermes*, v (1871), 161-73; cf. also Holzappel, *Klio*, xv (1918), 116, n. 3.

³ Ibid. 169, n. 5.

⁴ Nischer, 'Die Schlacht bei Cremona', *Klio*, xx (1926), 187-201, esp. 192 and n. (his reconstruction of the second battle of Bedriacum is, however, mistaken); Dessau,

Gesch. d. röm. Kaiserzeit, 2. 1. 357 n., 358, n. 4 (the plausibility of whose views cannot here be argued). By way of contrast, I quote the unhappy remark of M. Bassols de Climent (edition, Madrid-Barcelona, 1951): 'Se trata de un puente tendido sobre el río Tartaro, que permitía la comunicación de las tropas . . . con el sur de Italia.'

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A glance at the 1:100,000 map¹ makes the matter clearer. North and north-west of Ostiglia, the Tartaro wanders through the *palus* or *paludes* of Tacitus, the Valli Grandi Veronesi,² controlled and reduced in the nineteenth century, perhaps more extensive in the first. Behind Caecina's camp lay 'the river'—the Po, which makes a knee above Hostilia and flows south-east past its walls; north and north-west lay the swamps; and east or north-east ran the road to Forum Alieni and Ateste, whence the enemy threatened advance before they occupied Verona. It was an excellently chosen position, had but Caecina selected it for defence, or Antonius for attack. Mere logic bears out the facts of geography. If Caecina's men thought it necessary to break the bridge over the meagre Tartarus, as the commentators claim, then one or other of two consequences must have ensued: either risking, and yet avoiding, contact they must have marched north of the Po by the direct Hostilia-Mantua-Cremona route, or they must have broken also the much more important bridge over the Po. The former of these was denied—and rightly—by Mommsen himself; and were the latter true, Tacitus would have written not *abrupto ponte*, but *abruptis pontibus*.

Our deduction therefore is that Caecina's camp lay where Tacitus says it lay, between Po and Tartarus, and that his men broke the bridge over the Po, and that alone. We have only been misled so long because, instead of writing *relictis castris, Hostilium rursus, inde abrupto ponte Cremonam pergunt*, Tacitus thought it neater to group his participles and say *relictis castris, abrupto ponte Hostilium rursus, inde Cremonam pergunt*.

2. THE NORTHWARD MARCH OF VALENS

Ch. 41. 3: *eo metu et paucis, quos aduersa non mutauerant, comitantibus cohortes Ariminum praemittit, alam tueri terga iubet, ipse flexit in Umbriam atque inde Etruriam . . .*

So M. Acidalius, followed by most recent editors, claimed to have restored the 'true order' by reading: *eo metu cohortes Ariminum praemittit, alam tueri terga iubet: ipse paucis, quos aduersa non mutauerant, comitantibus flexit in Umbriam atque inde Etruriam . . .* Such arbitrary departures from the best manuscript reading are usually dangerous, and this one will be found to be unnecessary. (It also involves suppressing *et*.) Only if the reading of M is nonsensical or blatantly un-Tacitean may we venture to abandon it.

The Vitellian leader, Valens, on hearing of the defection of the Rauenna fleet in October A.D. 69 after leaving Rome, does not care to continue his northward journey without calling for reinforcements from the capital. The three urban cohorts and one auxiliary *ala* which Vitellius sends prove to be unreliable (cf. 41. 2 *etiam si fidissima foret*; *ibid. pauidos periculorum*; 42. 1 *trepidus*), and Valens, afraid of further desertions (*eo metu*), stealthily escapes with a few followers of tried fidelity, travelling by unfrequented routes through Umbria and Etruria, and eventually reaching the Maritime Alps. The difficulty which prompted Acidalius and others to rewrite M is that Valens cannot strictly be said to have only a few companions at the moment of dispatching considerable forces elsewhere; or, in other words, the state indicated by *comitantibus* is not contemporaneous with *praemittit* and *iubet*. But we need far stronger reasons than this to justify rewriting M. Silver Latin, and especially the Latin of Tacitus, abounds in instances of participles employed without precise time

¹ No. 63 (Legnano).

² For the Valli Grandi Veronesi see *Encicl. ital.* xxxiv. 936 f.

significance; and the collocation of an ablative of attendant circumstances with an ablative absolute (also of attendant circumstances) is very common in our author. Indeed, the situation expressed by *eo . . . comitantibus* endures before, during, and after the actions expressed by *praemittit*, *iubet*, and *flexit*,¹ and Valens' fears are prompted by the realization that he has few dependable followers. In the logic of psychology, if not of chronology, the two phrases cohere.

It may perhaps help at this point if we attempt to determine what Tacitus has not explicitly told us, namely where Valens is when he receives the reinforcements and decides upon an escape. We may at once dismiss the ingenious but impossible suggestion of Henderson and Wolff-Andresen that Valens, having gone north and turned about, is now travelling back *southwards* between Ravenna and Ariminum, and that he sends forward his cohorts to the latter town, protecting himself from the traitorous sailors of Ravenna by the squadron posted in the rear. A man as frightened as Valens was would certainly not spend a fortnight of deliberation or dalliance in close proximity to disloyal Ravenna; and when Tacitus says of a commander proceeding, however slowly, from Rome to northern Italy, that he *cohortes Ariminum praemittit*, it seems reasonable to understand that he is south of Ariminum. How far was he from Rome, and upon what road? It is by *pernices nuntii* that he hears of the revolt of the sailors, where the adjective is only worth using if the distance covered by the messengers is sufficiently great to space out fast and slow travellers (and this would not be so upon Henderson's theory, implying a distance less than that separating Ariminum and Ravenna) and the apparent ease and speed with which Valens asks for, and receives, reinforcements at 41. 1 argues proximity to Rome. So far he has moved slowly, *seignius quam ad bellum incedens*; his journey is only in its initial stages, *coeptum iter*; and much is made of his *cunctatio* and *illicitae uoluptates*.² In what town was Valens waiting as a burdensome and unwelcome guest? The commentators (except Ritter, who in his 1869 edition recklessly printed <*Narniae*> *accepit* at 40. 1) despair of an answer, or gratuitously suggest that Tacitus was confused. One solution, however, will make sense, and one only. The words *flexit in Umbriam atque inde Etruriam* imply that Valens was not already in those regions, and that either now or a little later he changed the direction of his movements. Nobody in his senses would have chosen a road other than the Via Flaminia by which to gain the northern front from Rome via Ariminum, and the Via Flaminia enters Umbria at the Tiber crossing between Falerii and Oriculum. The probability is that Valens waited at Falerii. What were his subsequent movements?

He followed the Via Flaminia northwards to, say, Mevania. Here the troops were divided, the main infantry force proceeding farther along the Via Flaminia to occupy menaced Ariminum, and the small cavalry force being posted on the main road at or near Mevania to prevent victorious Flavians or disloyal Vitellians from pursuing Valens as, with his small bodyguard, he struck up over the hills to Perugia and Pisae. He may have been concerned, also, to rid himself of half-hearted followers, and move with speed and secrecy.³ At first

¹ For the tense of *flexit* see Sörbom, *Variatio sermonis Tacitei*, pp. 100 f.

² A less colourful reason for delay may be found in Valens' concern at not receiving from Caecina as arranged (*H.* 2. 100. 2)

his own troops, *legio v Alaudae* and vexillations of I, xv, and xvi.

³ It is not necessarily illogical (as Hardy, *J. Phil.* xxxi [1910], 148 claims) to use *praemittit* of a man who did not intend to

his plan was to make for Hostilia or Cremona by a route on the west of, and then across, the Apennines, *per occultos tramites uitata Rauenna*, well away from the Via Flaminia and crossing the Via Aemilia; but on hearing, while still in Etruria, of the result of the second battle of Bedriacum, he turned westwards and took ship from Portus Pisanus towards Gaul.

Now let us look back at M's version of Tacitus' account. The narrative is susceptible of a rational explanation, though like so many other accounts of army movements in Tacitus, it is severely compressed, and made to serve the moralizing and dramatizing propensities of the historian. Delay and dissipation are followed by hurried flight and a desperate venture. The rapidity of the offending sentence annoys the severely logical or unimaginative mind. Yet both the phrases *eo metu* and *paucis . . . comitantibus* bring out Valens' fear of treachery, and it is this fear that prompts the three actions next to be indicated—the occupation of Ariminum, the posting of the cavalry, and the quick and secret flight. Chronologically we strictly require the following sequence:

1. in Umbriam progressus
2. (postquam ad locum idoneum uenit,) cohortes Ariminum praemittit, alam tueri terga iubet;
3. inde ipse, paucis . . . comitantibus, in Etruriam flexit.

What has happened is that Tacitus has interchanged *Umbriam* and *paucis comitantibus* in such a way that the former now joins *Etruriam* and the latter is coupled with *eo metu*. The grouping of ablatives, the rapid finite verbs, and the blurred chronological sequence remind us of the description of events at Hostilia, and lead us to our third example.

3. THE ESCAPE OF DOMITIAN FROM THE CAPITOL

Tac. H. 3. 74. 1: Domitianus prima irruptione (19 December 69) apud aedituum occultatus, sollertia liberti lineo amictu turbac sacrificarum immixtus ignoratusque, apud Cornelium Primum patrum clientem iuxta Velabrum delituit.

86. 3: praecipiti in occasum die (20 December 69) ob pauorem magistratum senatorumque, qui dilapsi ex urbe aut per domos clientium semet occultabant, uocari senatus non potuit. Domitianum, postquam nihil hostile metuebatur, ad duces partium progressum et Caesarem consalutatum miles frequens utque erat in armis in paternos penates deduxit.

Suetonius, *Dom.* 1: irrumpentibus aduersariis et ardente templo apud aedituum clam pernoctauit, ac mane Isiaki celatus habitu interque sacrificulos uanae superstitionis cum se trans Tiberim ad condiscipuli sui matrem comite uno contulisset, ita latuit, ut scrutantibus qui uestigia subsequi erant, deprehendi non potuerit. post uictoriam demum progressus et Caesar consalutatus . . .

Dio Cassius 65. 17. 4: Δομιτιανὸς δὲ καὶ Σαβίνος ὁ τοῦ Σαβίνου παῖς ἐν τῷ πρώτῳ θορόβῳ διαφυγόντες καὶ ἐς οἰκίας τινὰς κατακρυφθέντες ἐληλῆσαν.

The historian of Domitian's reign, Gsell, and all commentators upon the *Histories* of Tacitus remark without further comment that Tacitus and Suetonius

follow his van to Ariminum; for as far as Mevania he may in fact have travelled in the train of the cohorts if the latter were sent

ahead from Falerii, as is quite possible; or the verb may reflect Valens' ostensible rather than his real intentions.

nus give us different accounts of the escape of the young Domitian from the Capitol. The alleged discrepancy is strange. The story must have been often recalled during Flavian times, and that eyewitnesses were not lacking is evident from the detailed references of our authors to individuals. It is strange too that the accounts of Tacitus and Suetonius which show striking similarities of phrase (*inruptione—irrupentibus; sacrificialum—sacrificulos; postquam nihil hostile metuebatur—post uictoriam; progressum—progressus; Caesarem consulatum—Caesar consalutatus*) pointing to a common source, should also show no less striking dissimilarities of content. But the attentive reader of Tacitus is more likely to be worried by another problem. The words of Tacitus have been generally understood to imply that Domitian made his way from the Capitol to the Velabrum by joining an Isiac procession in the guise of a priest. Godley is the only scholar to feel uneasy about this: 'It is remarkable that the rites of Isis were actually celebrated in the Capitol' he remarks in his commentary *ad locum*. It is worth asking whether the theory that Isis continued to be worshipped on the Capitol in early imperial times is sound and whether T. H. 3. 74 can be held to support it. Evidence allegedly in favour of the theory (C.I.L. i. 1034, vi. 2248) is Republican and there are serious arguments against it. The Egyptian deities were expelled from the national shrine of Rome in 58 B.C.¹ according to the testimony of Tertullian, *Apol.* 6: 'Serapidem et Isidem et Arpocratem cum suo Cynocephalo Capitolio prohibitos, id est, curia deorum pulsos, Piso et Gabinius consules non utique Christiani euersis etiam aris eorum abdicauerunt, turpium et otiosarum superstitionum uitia cohibentes' (so *Ad Nat.* i. 10; Arnobius 2. 73), and there was a second demolition of altars in 47 B.C.² There is no record of any reversal of this policy by the early emperors, though some, including Augustus and Domitian, were willing to tolerate and indeed support the worship of Isis in her great temple in the Campus Martius, outside the *pomerium*.³ But a procession of Isiac priests is not only in the last degree unlikely on the Capitol in A.D. 69; it is downright impossible on a Capitol which has just been the scene of fire and bloodshed, on the eve of the entry of the Flavian forces into Rome, the murder of Vitellius, and the last desperate stand of the Vitellian praetorians. This was no time for Capitoline processions, Isiac or other.

What then are we to make of the Tacitean account and its apparent conflict with the story of Suetonius? The latter is somewhat easier of belief in that it places the Isiac procession on the day following the sack of the Capitol, and does not infer that this was the means of Domitian's escape from it. Must we assume that Tacitus is unreliable? Is it possible to produce some kind of harmony among these discords, and then return more critically to Tacitus' score?

¹ The demolition of private shrines of Isis had already begun in 59 B.C., if we accept Ziehen's ingenious restoration of a phrase in Cicero, *ad Att.* 2. 17. 2, as *ut prae hoc Isis Curiana stare uideatur* (*Hermes* xxxiii [1898], 341 and cf. Seeck, *ibid.* xliii [1908], 642 f.).

² Dio Cassius 42. 26. 1: ἐκείνῳ τε γὰρ τῷ ἔτει τελευτῶντι ἄλλα τέ τινα συνέβη, καὶ μέλυσσαι ἐν τῷ Καπιτωλίῳ παρὰ τὸν Ἡρακλέα ἰδρύθησαν. καὶ (ἐτύγχανε γὰρ ἱερὰ τότε γινόμενα) ἔδοξε γνώμῃ τῶν μάντεων πάντα αὐτὸς τὰ τε ἐκείνης καὶ τοῦ Σεραπίδος τεμενίσματα

κατασκάψαι.

³ For the disfavour with which the worship of Isis was viewed officially in the period from Sulla to Vespasian see Preller, *Römische Mythologie*, pp. 727 ff., P.-W. s.v. 'Isis', coll. 2103-4 (Roeder), and A. D. Nock, *Conversion*, pp. 74-75, 124 ff. Lucan 8. 831 refers to the temple of Isis Campensis, and there is nothing in Suet. *Otho* 12. 1 to connect Otho's singular devotion to Isis with the Capitol.

The narrative resulting from a combination of the available evidence is the following. On 19 December 69 the Capitol held by Sabinus and his followers was captured by the Vitellian praetorians, and in the process the Temple of Iuppiter Capitolinus was burnt; on 20 December¹ Vitellius was murdered and Antonius Primus entered Rome; and on 21 December the Senate met to recognize Vespasian as the new emperor and his sons as the new Caesars. On the evening of 20 December it was, or was thought to be, still too dangerous for the senators and *a fortiori* for Domitian, to appear in public, and they can only have left their hiding-places on 21 December, when the news of the death of Vitellius and of the victorious entry of the Flavian army became known in every part of the city. We have thus to find places of concealment for Domitian (and his companion the young Sabinus) for the latter part of 19 December (the attack on the Capitol took place early in the day, but its duration is unknown), the night of 19/20 December, and the day and night following. Tacitus mentions two places, a helper and two hosts, and leaves chronology vague; but if we add Suetonius' account to his, three hosts are mentioned: the *aedituus* of Iuppiter Capitolinus, Cornelius Primus of the Velabrum area, and the mother of a fellow-student of Domitian's who lived in Regio XIV. There is also the unnamed freedman who thought of disguising Domitian as a priest of Isis.²

When the Capitol was stormed, Domitian was hidden by the *aedituus* in his lodge (or, as this was an obvious hiding-place, perhaps in the crypt of the burnt-out and ruined temple³), and he spent the whole of the night there (*pernoctavit*, Suetonius). At dawn on the 20th he was smuggled down the slopes of the Capitol to the house of Cornelius Primus near the Velabrum. On the suggestion of the unnamed freedman, he was dressed in a linen garment and thrust in among a band of Isiac priests who, in view of the imminent penetration of the Campus Martius by Antonius' troops and the danger of the destruction of their temple, were hurriedly moving through the Velabrum and conveying their cult emblems to a safer place, away from the threatened quarters and across the Tiber. In the press and tumult the masquerade was not detected by the priests themselves or by Vitellian search parties, who were anxious to secure Domitian as a hostage and bargaining weapon. Once beyond the Tiber bridges, which might be expected to be more carefully guarded, the young man managed to leave the Isiac throng, and once more baffled his pursuers overnight, this time by hiding with the mother of a fellow student. By late evening Rome was completely in Flavian hands, but no prominent person in hiding dared to show himself. When daylight came on 21 December Domitian recrossed the Tiber, revealed himself to the Flavian leaders encamped in the

¹ For this date I follow the careful reasoning of L. Holzapfel, 'Römische Kaiserdaten 3', *Klio* xliii (1913), 295 ff., rather than the view of Weynand (P.-W. s.v. 'Flavius', coll. 2544, 2624, and 2640) and others (e.g. Charlesworth in *C.A.H.* xi. 4), who assign the death of Vitellius to 21 December.

² The disguise was not novel. In 43 B.C. the aedile Marcus Volusius escaped the proscriptions by putting on the long linen surplice and the black dog's head mask of Anubis, furnished by a friend who was a priest of Isis (Appian, *B.C.* 4. 47). So also the Capitoline hiding-place had been antici-

pated by Piso Licinianus (Tac. *H.* i. 43), who took refuge, but ineffectually, in the *contubernium* of the Temple of Vesta in the forum Romanum. Here the attendant's house must have formed part of the sacred building itself, but on the Capitol, where the temple-area was extensive, it may have lain some little distance from the *aedes*, since it was not burnt with it, but was later pulled down by Domitian to provide a site for his Jupiter shrine.

³ Where he might well consider himself in *sinu dei* (74. 1, quoted below).

Forum, and was ceremonially conducted by their battle-stained troops to his home near the Alta Semita. By moving from house to house (*oikias*, Dio Cassius) and by the assistance of faithful friends, Domitian had eluded his enemies, and the full story of his escape makes sense. Domitian lived to thank Capitoline Jupiter (but not the non-existent Isis of the Capitol) with games,¹ temples, and sculptured representations of his preservation, modest enough while his father lived, but boastful and ludicrous when he himself became the imperial vice-gerent of heaven: *ac potiente rerum patre, disiecto aeditui contubernio, modicum sacellum Ioui Conseruatori aramque posuit casus suos in marmore expressam; mox imperium adeptus Ioui Custodi templum ingens seque in sinu dei sacrauit* (74. 1).

The barely concealed sneer in the latter words reminds us that in giving us a short version of the story of Domitian's escape, Tacitus may well have been prompted in the choice of the events which he selected for mention not only by stylistic considerations but also by malice. Domitian hid at the first inrush of the enemy, without attempting resistance, *prima inruptione*; he owed his life to an Egyptian disguise and to the cunning of a freedman; and it was only *postquam nihil hostile metuebatur* that he ventured forth from his hiding-place. There is nothing heroic here, nothing to excuse Domitian's pompous representation of himself in the lap of Jupiter, and everything to give the lie to the flatteries of a Statius or of a Martial, or of the cringing Flavian historians.² And by a stylistic device that telescopes, in the penultimate and concluding sentences of Book III, the events of 20 and 21 December A.D. 69, Tacitus achieves an unusually effective climax.

Once again, then, Tacitus selects the salient and telling aspects of a story whose details he obscures by grouping participles out of chronological order. The sequence *occultatus . . . immixtus ignoratusque . . . iuxta Velabrum delituit* should, if the above reconstruction is sound, have read *occultatus . . . iuxta Velabrum delituit . . . immixtus ignoratusque*, followed by the mention of the third hiding-place across the Tiber. Restored to intelligibility, the story of Domitian's escape shows us that our authorities conflict less often than they are thought to do, and that Tacitus, though selecting and in minor ways distorting his facts in the interest of style or effect, preserves many features of the fuller and more detailed information which he found in his sources.

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¹ Games: see Italo Lana, 'I Ludi Capitolini di Domiziano' in *R.I.F.C.*, n.s. xxix (1951), 145-60.

² Statius, *Theb.* 1. 21 *defensa prius uix pubescentibus annis Bella Iouis*; *Silu.* 1. 1. 79-81

tu bella Iouis . . . Marte domas; Martial, *Ep.* 9. 101. 14 *prima suo gessit pro loue bella puer* (Domitian, born 24 October 51, was now 18 years old); Josephus, *B.I.* iv. 11. 4 *δαιμονιώτερον διασώζεταί*; Tac. *H.* 2. 101. 1.

ON MAKING SENSE OF A PHILOSOPHICAL FRAGMENT

A FRAGMENT of ancient philosophy is like a code message which it is the task of the scholar to decipher. The cryptogram has come down to us, but not the key.

In case this beginning should be thought *obvious* by anyone, let me say at once that I do not believe a word of it, though I believe that the attitude it epitomizes is by no means uncommon and is part of the explanation of a tendency to mishandle philosophical fragments. The attitude is to be found, for example, in some things M. Untersteiner has said in his recently translated book on the Sophists¹ about the meaning of the well-known statement of Protagoras: πάντων χρημάτων μέτρον ἐστὶν ἄνθρωπος, τῶν μὲν ὄντων ὡς ἔστιν, τῶν δὲ οὐκ ὄντων ὡς οὐκ ἔστιν.

This is what Untersteiner puts forward as 'the translation'² of Protagoras' statement: 'L'uomo è dominatore di tutte le esperienze, in relazione alla fenomenalità di quanto è reale e alla nessuna fenomenalità di quanto è privo di realtà' ('Man is the master of all experiences, in regard to the "phenomenality" of what is real and the "non-phenomenality" of what is not real'). A considerable part of the support which he claims for this 'translation' is derived from a linguistic *Excursus*,³ in which he gathers together passages from various authors, with the aim of demonstrating that each separate word of Protagoras bears *exactly* the meaning which he has assigned to it. But I had better quote Untersteiner's own words here, since it is his conception of the role of his linguistic investigation that I want particularly to attack. 'Per ottenere una più esatta esegesi di questa celebre proposizione di Protagora, è necessario riesaminarne i termini, anche sotto il rispetto linguistico, poiché l'interpretazione corrente a me sembra del tutto superficiale.' ('To obtain a more exact interpretation of this famous proposition, it is necessary to re-examine its terms from the linguistic point of view also, since the current explanation seems to me entirely superficial.') These are the words with which the linguistic *Excursus* is introduced. Untersteiner thereupon asserts that his purpose in reviewing the possible meanings of χρημάτων (and this remark is clearly meant to be applied to most of the other words in the proposition also) is 'per fissare con precisione quello di Protagora' ('to decide exactly which was used by Protagoras'). So the *Excursus* is supposed by Untersteiner to afford an independent and positive proof of the correctness of his interpretation of Protagoras' assertion. It appears that in his view the words μέτρον and χρημάτων (these are the crucial words) have a certain *fundamental* meaning⁴ which when rightly understood determines, each in conjunction with the other, the sense virtually of the whole

¹ *I Sofisti* (Giulio Einaudi editore, 1949) = *The Sophists*, trans. Freeman (Blackwell, 1954). My quotations in English are from Dr. Freeman's version throughout.

² 'la traduzione', p. 55 (Freeman, p. 42). Of course it is not a translation at all. For in the first place the expression 'dominatore di tutte le esperienze' is lacking in any obvious sense, whereas the Greek it is alleged to represent has an obvious sense; in the second

place the expressions 'fenomenalità di quanto è reale' and 'nessuna fenomenalità di quanto è privo di realtà' are intrusions of quasi-Kantian jargon.

³ *Excursus* al capitolo III, p. 96 (Freeman, p. 77).

⁴ Thus, 'Questo valore verbale di μέτρον "dominio su qualche cosa" mi sembra essere fondamentale': p. 103 (Freeman, p. 81).

statement. These fundamental meanings may be ascertained, Untersteiner thinks, from a consideration of the history and etymology of the words, and by paying attention to a few select passages of verse and prose in which they occur.

Now I shall contend that the learning and ingenuity which Untersteiner displays in his linguistic investigation of Protagoras' statement have been completely misapplied and that the very high-sounding claims which he makes for this investigation rest on an illusion. Nothing is, and nothing *could be*, contributed by it towards the serious understanding of Protagoras' statement, for the reason that the problem of understanding the meaning of *πάντων χρημάτων μέτρον ἐστὶν ἄνθρωπος* κ.τ.λ. is not at all the problem of assigning exact meanings to the words *χρημάτων* and *μέτρον* (nor for that matter to the words *πάντων*, *ἐστίν*, *ἄνθρωπος*, etc.). I hope to make this clear by distinguishing between two quite different ways in which the meaning of a statement may present a puzzle.

Consider first the kind of puzzle that is presented by the statement 'there is a fuchsia in the garden' to one who is uncertain of the meaning of the word 'fuchsia'. Such a person may speculate whether the word 'fuchsia' is the name of, say, a bird, an animal, a flower, or even a piece of gardening equipment. Here the puzzle about the statement is precisely a puzzlement about a word, and apart from this word the statement presents no difficulty: there is, one might say, nothing mysterious about the form of the statement, nothing puzzling about its *logic*. By contrast, consider the case of a person who, although quite familiar with the words 'blue' and 'key' (as this term is used in music) and also with the expression 'B flat', encounters the statement 'the key of B flat is blue' and is puzzled. This time the source of the puzzlement is not to be found, as in the previous example, in an imperfect understanding of the meaning of one or more of the words which are used in the statement.

Possibly someone might protest that he does not see any significant difference between the two cases, 'for in the first case it is ignorance of the meaning of the word "fuchsia" that causes the trouble, while in the second case it is surely ignorance of the meaning of the word "blue", or at least of the meaning of the word "blue" in this particular connexion'. But note the inevitable qualification 'in this particular connexion', for it makes all the difference. What it really shows is that it is not the word 'blue' by itself that creates the problem. The problem is not about the meaning of any of the words in the statement considered separately but about the meaning of the statement as a whole. The expression 'the meaning of the word in this connexion' is one of those logical pot-holes which are unfailing traps for travellers in the dark. It (or some similar expression) can readily delude the unwary into supposing that there is such a thing as (for example) *the meaning of 'blue' in this connexion* in precisely the sense that there is *the meaning of 'blue'*—a meaning consisting in something independent and self-sufficient, fixed and public; something which one either simply knows or is ignorant about; a recognized convention or linguistic rule which is always there for anyone to employ, even though the occasions when there is cause to employ it may be rare. In Untersteiner's case this particular confusion seems to form a part of a more general confusion, in the course of which he treats the meaning of a statement as a kind of simple product of the meanings of the (more important) words occurring in it, and regards these meanings in turn as a kind of simple proportion of the totality of possible meanings possessed by the words concerned. But to resume my reply to the

imaginary objector: it is misleading to say that the second type of puzzle is constituted by our ignorance of 'the meaning of "blue" in this connexion', because there is no such thing for us to be ignorant about in at all the way that there is the meaning of 'blue' or the meaning of 'fuchsia' for us to be ignorant about. If, on the other hand, we suppose ourselves to be ignorant simply of the meaning of 'blue', then we have the condition for the origin of a puzzle of the first type merely, and the second and more serious type of difficulty cannot yet have arisen for us. In other words we have to be familiar with the meaning of 'blue' before such a statement as 'the key of B flat is blue' can begin to create any serious puzzlement for us. And not only this: we shall fail to understand the nature of this puzzlement, and hence be unable to take steps to alleviate it, until we have digested the paradox that it is precisely because we *do* know what 'blue' means (and also what all the other words mean) that the second statement is peculiarly difficult to understand.

At this point it is convenient for someone to protest that if we know what the word 'blue' means, and if we know also the meanings of the other words that occur in the statement, then it simply *must* follow that we know what the statement means as a whole—assuming (what is doubtful) that the statement means anything at all. What this protest amounts to can now be seen. In one sense we undoubtedly do know what the statement means as a whole; although in another and more important sense we do not.¹ We know (though this knowledge is not a bit helpful to us) the meaning of the statement in what it would be natural to call the *linguistic* sense. For we are, I imagine, perfectly well able to translate the statement, and to know that we have translated it correctly, into French or Italian or any other language with which we may happen to be acquainted (provided that the French, Italians, or whoever else are not without the appropriate concepts, i.e. have expressions in their language corresponding to 'blue', 'key', and 'B flat').

Now in this sense I suggest it is obvious that we know well enough what *πάντων χρημάτων μέτρον ἐστὶν ἄνθρωπος* means. None of these words is at all odd or remarkable. Considered as a *translator's* problem the statement is more or less a cake-walk. We have always rendered it into English and we shall, I trust, ignoring Untersteiner's red-herring, always continue to render it, as 'Man is the measure of all things'.²

The sense in which we find it difficult to understand the meaning of the statement Protagoras made in the Greek language is the sense in which we find precisely the same difficulty in understanding its English (or French or Italian, etc.) equivalent. This difficulty is about the use or uses to which the statement may be put. It is the difficulty of discovering what we are intended to do with the statement, of ascertaining and understanding the philosophical role or

¹ We do not know the meaning of the statement 'the key of B flat is blue' until its use has been explained to us. If anyone should think there could be no conceivable use for it, let him consider this example: Johnson has found by experience that whenever he hears a piece of music played in B flat a blue colour-image presents itself to him, or else the contents of his field of vision take on a bluish tinge. Other colours associate themselves in a similar fashion with other

keys. Johnson has no sense of perfect pitch, but now he is able to tell the key of any piece of music he hears without verifying it on the piano or looking at the score. His friends are astonished. He tells them that the key of B flat is blue; but they cannot, of course, understand him—until he explains all this to them, i.e. *explains how the statement is being used*.

² 'He is the measure', we can add, 'both of what is and of what is not the case.'

roles which Protagoras may have had in mind for it. Our trouble with this fragment is by no means a *linguistic* trouble and has nothing essentially to do with the fact that it is a fragment of the Greek language and not of, say, the English language. If, by a gift of tongues from the gods, Protagoras had communicated his assertion in English, the problem for us would be unchanged. I say then that our trouble does not arise even in part because, as Untersteiner would have us believe, our dull wits have failed as yet to grasp those precise and exact senses of the component words which in combination with one another will precipitate out of the statement its Sibylline message and crystallize the unambiguous, self-contained, complete idea. For no such thing is to be found within the confines of the statement. To share Untersteiner's belief would be to treat the statement as if it were a cryptogram which required to be deciphered.

It is a feature of messages in code that they should be inscrutable in the absence of the appropriate key, i.e. that they should not be self-contained in one sense: but it is also characteristic of them to be highly self-contained in another sense—namely that they should be unambiguous and self-sufficient vehicles of information to those who are possessed of the means of decoding them. The recipient, having completed his decoding, must be left in no doubt about what he is to do with the information now that he has got it. His problem is simply that of assigning to the groups of letters, figures, etc., their correct and unambiguous meanings; and when he has done this his difficulties are over. But the problem presented to us by Protagoras' statement is rather the reverse of this. Here there is not the difficulty of discovering what the message is, of discovering what is actually being said; for this is not in any way hidden. We have the saying: the difficulty is to know what we are to do with it now that we have got it. For it is something of a *carte blanche*. Or it might be likened to a counter which is usable in a number of games. A person who participated regularly enough in philosophical discussion would not be without some idea of the nature and scope of the games that are relevant; he would at once recognize the statement's general type. (Statements of this type are, after all, a familiar feature of the metaphysical landscape: they function invariably as a sort of slogan, whose purpose is to summarize, collect, and brandish many arguments.) It is a statement, then, which might be supported by a vast range of different, though doubtless connected, considerations and which might allow various consequences or practical programmes to be derived from it. But until specific formulation is given to the arguments which are being taken on some particular occasion to justify it, and to any consequences which it may in turn be taken to justify, it amounts to hardly more than a mocking gesture. Hence a persistent inquiry as to its *precise* meaning can only meet the answer that this will depend on the circumstance of the statement's utterance. It would also have to be answered that there is an inevitable openness or unclarity about the meaning of this statement when it is not actually being used in any of the contexts that might be appropriate to it. This, be it noted, is the state in which Untersteiner insists, for the purpose of his linguistic inquiry, on considering it—a state of idleness, where no particular use is yet prescribed for it, where it is not embedded in any context of argument. The ensuing unclarity (which is logically quite inevitable) gets treated, through a misunderstanding, as a *verbal* unclarity, which is then thought to be removable by attention to linguistic considerations.

A defender of Untersteiner's methods might perhaps protest that a linguistic inquiry need not be (and that Untersteiner's is not) pursued in a narrowly philological spirit. Broadly conceived, a linguistic inquiry will amount (it may be said) to nothing less than a history of ideas. It will enable us to discern how a thought develops, to elucidate the relationships between concepts, to grasp the intellectual climate of a particular time. Hence it will enable us to set Protagoras' statement into a context—which is what I have said must be done if the meaning of the statement is to be understood.

If this protest affects my argument at all it is only to add fuel to it. I urged that the meaning of πάντων χρημάτων μέτρον ἐστὶν ἄνθρωπος, τῶν μὲν ὄντων ὡς ἐστὶν, τῶν δὲ οὐκ ὄντων ὡς οὐκ ἐστὶν should be regarded as quite open and undetermined until it ceased to be as it were an idle piece of mechanism and started to perform a function in connexion with some definite argument or arguments: that it was a misunderstanding to suppose that one could proceed to pin down and clarify its meaning by means of an investigation in which the statement was contemplated in a state of idleness. The more broadly the linguistic inquiry is conceived the more insidious becomes this misunderstanding. For in regarding Protagoras' statement as a repository of 'conceptual history' the investigator will seem perhaps to be infusing it with a kind of life. In truth he will be treating it, not as an organic unity with a function, not as the sort of thing that *could* live, but instead as an inert aggregate of separate word-units—and the fact that he may speak not of words but of ideas or concepts will not alter this. But—and here is the delusion—he may well find, if he is persistent, enough to say about the statement from this standpoint; powerful enough influences will be discovered to be at work; there will appear to be a sufficient number of things that 'Protagoras must have been aware of' for the meaning of the statement to appear to have been fixed in advance, without reference to its possible role in any discussion: as if, quite irrespective of the use to which the statement were going to be put, it could be said in advance that *this* or *that* is what its significance must be. Here is a bit of Untersteiner that I cannot forbear to quote:

Quindi l'idea non doveva essergli estranea. Se non la suggerì, fu non perchè egli ignorasse *καῖρός*, ma per la ragione che egli, con la sua originalità, sostituisce a *μέτρα καίρου* l'espressione πάντων χρημάτων μέτρον, con la quale veniva a dire che l' 'uomo è la pienezza, quindi il dominatore delle esperienze'. Protagora si libera da *καῖρός* che sottintendeva l'insanabile dissidio . . .¹

This piece of insane exegesis occurs on pp. 104–5 (Freeman, p. 82), where Untersteiner is anxious to connect Protagoras with Philolaus, 'il quale pensava che [la filosofia] consistesse τὰ τοῦ καιροῦ μέτρα εἰδέναι. Precetto di vita, è dunque, il dominio (μέτρα) di καῖρός'.² Observe (1) how Protagoras almost has to be excused for not using the words μέτρα καίρου; (2) how philosophizing

¹ 'Therefore the idea cannot have been strange to him. If he did not mention it, it was not because he did not know of *καῖρός*, but because he, with his usual originality, substitutes for μέτρα καίρου the expression πάντων χρημάτων μέτρον, by which he means that 'Man is the completion, therefore the

master, of experiences'. Protagoras frees himself from *καῖρός*, which he understood as (the) insane strife . . .'

² 'Who believed philosophy to consist in τὰ τοῦ καιροῦ μέτρα εἰδέναι. A precept for life is therefore the mastery (μέτρα) over καῖρός.'

is implied to be a matter of substituting 'con la sua originalità'—Protagoras might have been doing a crossword puzzle; (3) how it is suggested, absurdly, that the word *μέτρα* might be rendered suitably as 'il dominio' ('mastery'), when it is the object of the verb *εἰδέναι*; (4) how Untersteiner manages within a small space to produce four gems of gibberish—l'uomo è la pienezza, quindi il dominatore delle esperienze; si libera da *καῖρός*; il dominio di *καῖρός*; *καῖρός* che sottintendeva l'insanabile dissidio (the fact that the sense of these expressions is confused is, of course, quite independent of the fact that they are expressions in Italian).

When Untersteiner comes to discuss the evidence of Plato and Sextus Empiricus, who give us some indication of the reasoning Protagoras used in connexion with his statement, he has no hesitation in castigating both of these authorities for their wilful error¹ in misinterpreting *μέτρον* as 'criterio' (criterion). Yet he accepts most of the argument reproduced at *Theaet.* 166 e-7 d at least, and virtually all that is given by Sextus (*Pyr. H.* 1. 216-18), as genuinely Protagorean. Now any reader may verify that in these contexts the rendering of *μέτρον* as 'criterion' accords perfectly well with the sense that the entire argument requires the *μέτρον πάντων* statement to bear. Sextus' gloss *κριτήριον* (which incidentally is Sextus' alone, not Plato's), although totally superfluous, does no violence whatever to the sense. It is doubtful whether the same could be said of the rendering 'dominatore';² but even if the same *could* be said, our understanding of Protagoras' thesis would be in no way furthered.

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¹ See p. 100 (Freeman, p. 79).

² The sentiment *καὶ σοί, εἰν τε βούλη εἰν τε μή, ἀνεκτόν ὄντι μέτρῳ* bears itself awkwardly in the guise of 'e tu, sia che lo voglia, sia che non lo voglia, devi sopportare di essere un dominatore (*μέτρον*)'. Why should 'being a master' be asserted to be

something 'you must put up with'? Perhaps the oddness of this was felt by Untersteiner himself, for he deemed it necessary to append the Greek word in brackets (p. 68). Dr. Freeman here adds something on her own account—amusingly, to my mind (Freeman, p. 53).

A NOTE ON HORACE AND PINDAR

Ac ne me foliis ideo brevioribus ornes
quod timui mutare modos et carminis artem,
temperat Archilochi Musam pede mascula Sappho,
temperat Alcaeus, sed rebus et ordine dispar,
nec socerum quaerit quem versibus oblinat atris,
nec sponsae laqueum famoso carmine nectit.
hunc ego, non alio dictum prius ore, Latinus
vulgavi fidicen.

Horace, *Epistles* I. 19. 26-33

Ac ne me foliis ideo timendum, ne me carpas, tamquam in metris nihil innovare ausum ac proferre pro meo. multa, inquit, ex diversis auctoribus etiam ipse composui; docetque, quem ad modum ipse composuerit.

Temperat Archilochi Musam. et Archilochi, inquit, utimur et Sapphicis versibus. *Mascula* autem Sappho, vel quia in poetico studio est, in quo saepius mares, vel quia tribas diffamatur fuisse.

Temperat Alcaeus. Miscemus, inquit, et Alcaei metrum, sed (neque isdem rebus) neque eodem ordine versuum.

Porphyrion ad loc.

ALTHOUGH not tenable in details, Porphyry's interpretation seems to me generally preferable to Bentley's, despite the very wide acceptance of the latter. Horace is in all seriousness defending his claim to originality. On the Bentleyian interpretation, it is a curious defence that he is made to offer:

'I used Archilochus' metres, but my subject-matter is different. You say I was afraid to alter the metre and technique? Well, Sappho used Archilochus' metre, so did Alcaeus, though he changed the subject-matter and order of the lines'—yes, Alcaeus; in Latin I am the first to follow him at least.'

On the face of it, this is a claim to originality in the Epodes and minor Odes,² disregarding (quite naïvely) the Sapphics in which Catullus anticipated him. It is almost the opposite of what is required. As the Scholiast sees, Horace should be speaking about his own Sapphics and Alcaics, i.e. 'Sappho' and 'Alcaeus' should mean here the poets as they appear in Horace's Latin. What he should say is:

'My Sappho and Alcaeus are different from their originals and from those of Latin predecessors just as my Archilochians are different from Archilochus', and different in metre too.'

Rejecting Porphyry's remarks on Sappho and his mistaken reference of *hunc* (to Archilochus) later, the gist of the passage runs, I think:

'And that you shall not esteem me less highly for not having dared

¹ As editors remark, this metrical originality in Alcaeus does not really help Horace's argument.

² I do not see how a wider application can be made out, even if Sappho and Alcaeus

made up the metres which bear their names out of Archilochus' raw materials. Horace will still be speaking of his direct borrowings from Archilochus.

(*timui*—past tense, i.e. in the case of my earlier Epodes and Odes) to vary the metre and the poetic technique, Sappho (now) relieves my Archilochian Muse (ironical understatement in view of the proportions of each), but a Sappho manly in her metre (a perfectly natural translation with the order of the words as it is) and Alcaeus relieves them, but (*sed* is now appropriate and not open to Bentley's objections) an Alcaeus different in matter (for example, applied to loftier themes) and (metrical) style¹—insert here a stronger stop—my Alcaeus has none of the Archilochian (or Lucilian) vices; he is "ingenuus" (colon after *nectit*) I am unquestionably the first to render his kind of poetry in Latin.²

I believe that Horace consciously modelled his modifications of the Sapphic and Alcaic metres on Pindar's dactylo-epitritic odes, and that this is what he means by the 'masculinity' of his Sapphics and the new *ordo* of his Alcaics. After all, there must have been in Horace's mind some very powerful reason for making the 'internal anceps'² invariably long. It will not do to say that it had something to do with the word stress in Latin or that he was gratuitously restricting the freedom of the metre as seen in Catullus. The structure of many Odes and the use of myth in the longest betray Pindaric influence, as Wickham and A. Y. Campbell emphasize. When Horace does compare himself directly with Pindar, he uses Pindar's metaphor of the bee to describe himself.³ The influence of Pindar on Horace in other respects is such that it would be surprising if the metre showed no effect.

Of course, Pindar as a direct model for Latin lyric is hardly possible, as Horace himself insists.

per audaces nova dithyrambos
verba devolvit numerisque fertur
lege solutis. (Odes 4. 2.)

Horace coins words⁴ and approves of modest⁵ innovations of this kind. He is himself *verbis felicissime audax*, but in point of metre something more regular and simple is demanded. What is possible, as Horace saw, is to give Pindaric

¹ *Ordo* used absolutely means, as Cicero says it does (*Off.* 1. 142), 'good order', 'planned order', not just 'order', 'sequence'. In Horace's usage, this sense is emphasized by adjectives (*Od.* 4. 15. 9 of ethics, *A.P.* 41 of literature) and is not completely lost even with *prius* (*Sat.* 1. 4. 58). Right arrangement, inseparable from the right use of words, is the great feature of Horace's theory (*A.P.* 47, 242) and practice. In view of the previous line and the general sense, *ordine* ought to refer to the metre and would naturally have that meaning of 'right arrangement' and 'good order' in metre (likewise inseparable from the proper use of words) which it has in the other fields. *Ordo* is in fact a *mot juste* for the subtle but effective features of rhythm which Horace introduces.

² See A. M. Dale in *C.Q.* xlv, xlv and D. L. Page, *Sappho and Alcaeus*, p. 321. It seems likely that Horace would be able to scan the more obvious Pindaric metres, how-

ever bad the manuscript tradition in the matter of line division, and that he would recognize the epitrite as a foot, as Hephaestion does later (*No.* 2). I follow Professor Dale's analysis, since it should now be standard, but a drawback in cases like the present is that while every 'anceps' may be theoretically doubtful, some are much more doubtful than others. The effect of the analysis is to centre all discussion on the prevalent lengths of the *syllabae ancipites* in various poets. There is a point at which the quantitative difference becomes qualitative. In older terminology one might try to indicate this by saying that Horace had converted a '3/4 measure' into a '4/4'.

³ *Od.* 4. 2. 27; *Pyth.* 10, Ep. 7.

⁴ e.g. *eradenda, immetata, emirabitur, intaminatis*, almost all of them coined to make the most of the sounding three long syllables—a Pindaric feature, v. sub.

⁵ *A.P.* 51 ff.

sonority to the Alcaic and Sapphic metres by a few simple but rigorously observed modifications.

Sandys describes the 'Dorian rhythm of the dactylo-epitritic Odes' as 'grave and strong, steady and impressive'. The same adjectives are very naturally applied to Horace's metres. This quality in both derives at least in part from the recurrence of groups of three long syllables bearing a metrical stress on the last. The groups result from a regularly long 'internal anceps' and also, in Pindar's case, from his favourite form of dactylic element:

- - - - - + - (regularly long)

preceding the long initial syllable of an epitrite.

To add further weight, where an 'anacrusis' or introductory 'anceps' occurs before an epitrite in Pindar, it is almost invariably long. It is notable that in Horace too (in the first three lines of the Alcaics) 97.5 per cent. are long—none are short in the fourth book. In the metre of Alcaeus himself, in all the usable fragments in Lobel and Page,¹ 76 per cent. only are long. In the case of internal 'anceps', 69 per cent. are long in Alcaeus as against 100 per cent. in Horace.

In the Sapphics of Sappho 66 per cent. of the internal *syllabae anceps* are long,² in Alcaeus' Sapphics 76 per cent.,³ in Catullus' two poems 90 per cent., in Horace 100 per cent.

In Glyconics and Pherecrateans Horace similarly introduces an absolute rule of long syllable in the second place where in Catullus it is still variable. To my mind this is also accounted for by a desire to achieve Pindaric solemnity on the lines of the normal 'dactylic element' of Pindar.

In each case the significant fact is that Horace makes absolute rules, treating Alcaics and Sapphics as if they were composed of epitrites (in Hephaestion's sense) and simple dactyls. He recognized that this 'Pindaric' form of the metre would better suit the sonority of Latin;

princeps Aeolium carmen ad Italos
deduxisse modos.

It was no longer a foreign metre, but 'at home' in Latin and able to stand on its own feet without reference to the originals.

In the exploitation of the groups of long syllables for special emphasis on significant words the similarity of Horace to Pindar is sometimes striking:

Pind. *Ol.* 11, Ant. α: τὰ μὲν ἀμετέρα
γλῶσσα ποιμαίνειν ἐθέλει

Hor. *Od.* 1. 10. 3: voce formasti catus et decorae
more palaestrae

This position of the break in the dactyl is regular in Horace and common in Pindar.

Pind. *Ol.* 6, Ant. β: ἄ τοι Ποσειδάωνι μυχθεῖσα

Hor. *Od.* 4. 14. 35: portus Alexandria supplex

Pind. *Ol.* 6, init.: χρυσέας ὑποστάσαντες εὐτειχεῖ προθύρῳ θαλάμου
κίονας

Hor. *Od.* 2. 1. 35: non decoloravere caedes

¹ *Poetarum Lesbiorum Fragmenta*.

³ *Ibid.*, p. 324.

² Page, *Sappho and Alcaeus*, p. 318.

For these very long and sounding proper names and compounds in the third line of the Alcaic, which are characteristic of Horace, there is no real parallel in the surviving fragments of the Lesbian poets. The feature is so marked in Horace as to make the third line the pivot of the whole stanza.

Pind. *Nem.* 5, Ant. γ: ἤτοι μεταίξαντα καὶ νῦν . . .

Hor. *Od.* 3. 23. 15: parvos coronantem marino

Pind. *Isth.* 6, Str. α: σπένδειν μελιφθόγγοις ἀοιδαῖς

Hor. *Od.* 4. 4. 11: nunc in reluctantis dracones

Examples can be multiplied. The changes introduced by Horace are not drastic, but they are absolute and strikingly effective in adapting the metres to Latin. They justify the more explicit claim to originality which I think he is really making in the passage quoted.

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CALLIMACHUS AND CONOPION¹

Οὕτως ὑπνώσαις, Κωνώπιον, ὡς ἐμὲ ποιεῖς
κοιμᾶσθαι ψυχροῖς τοῖςδε παρὰ προθύροις.
οὕτως ὑπνώσαις, ἀδικωτάτῃ, ὡς τὸν ἑραστήν
κοιμῖζεις, ἔλεον δ' οὐδ' ὄναρ ἡντίασας.
γείτονες οἰκτεῖρουσι, ἐν δ' οὐδ' ὄναρ· ἢ πολὺ δέ
αὐτίκ' ἀναμνήσει ταῦτά σε πάντα κόμη.

In his monumental edition of Callimachus,² R. Pfeiffer has questioned the authenticity of three epigrams. More than fifty years ago U. v. Wilamowitz-Moellendorff had rejected *Ep.* 3³ and *Ep.* 36⁴; but Pfeiffer seems to be the first critic to exclude *Ep.* 63 (= *Anth. Pal.* 5. 23) from the collection of Callimachus' epigrams. Although he sets forth his objections in a long footnote, none of the reviewers⁵ has so far discussed this point. Since the problem is considerably more complex than Pfeiffer seems to imply, it may be desirable to present the whole evidence.

In the *Anth. Plan.*,⁶ from which all editors before Blomfield (1815) had excerpted Callimachus' epigrams, *Ep.* 63 follows Rufinus' epigram *Anth. Plan.* 7. 139 = *Anth. Pal.* 5. 19. It is attributed by Planudes to Rufinus, and Pfeiffer seems inclined to accept this attribution. Blomfield, whom all other editors before Pfeiffer have followed, found that the *Anth. Pal.*⁷ attributed the epigram to Callimachus and added it to the collection where it appears ever since as the last poem. It is the only Callimachean epigram that is attributed by Planudes to another author. Three epigrams that are *Καλλιμάχου* in the *Anth. Pal.*, *Ep.* 3,⁸ 10, and 62, appear in the *Anth. Plan.* as anonymous. Of *Ep.* 29 Planudes offers only v. 3-4.

No other epigram of Rufinus is also attributed to Callimachus, but one, *Anth. Pal.* 5. 71 is given (by the *Appendix Barberino-Vaticana* of the *Anth. Plan.* and the annotator of the *Cod. Vat.* 1416) to Palladas.⁹ Outside of the *Anth. Pal.* four epigrams are ascribed to Rufinus, three of which (*Anth. Pal.* 5. 50; 90; 95) are anonymous in the *Anth. Pal.* and probably not by Rufinus,¹⁰ while the fourth (*Anth. Pal.* 5. 89) is no doubt the work of Marcus Argentarius.¹¹

¹ I am indebted to Professor Herbert N. Couch of Brown University who has read this paper and made several valuable suggestions.

² *Callimachus*, edidit R. Pfeiffer (Oxford, 1953), ii. 81, 90, 99.

³ In his third edition of the epigrams (1907), 8; as an imitation of Hegesippus, *Anth. Pal.* 7. 320; but the last editor of the Greek Anthology, P. Waltz, maintains its authenticity, *Anth. Gr.* iv (1938), 190.

⁴ Wilamowitz, *Hermes* (1877), 346; *Hellenistische Dichtung*, i (1924), 133, n. 3; but A. S. F. Gow, on Theocrit. *Id.* 5. 106 and *Ep.* 22. 2 attributes it to Callimachus.

⁵ H. Herter, *Gnomon* (1954), 76; A. Rosagni, *R.F.I.C.* (1954), 191 f., E. A. Barber,

C.R. (1954), 228.

⁶ *Editio princeps* by Ianus Lascaris (1494).

⁷ *Editio princeps* by Ph. Brunck, *Anal. Vet. Poet. Gr.* (1772 ff.), see Pfeiffer, op. cit. p. xciv.

⁸ It is not absolutely certain whether this epigram is spurious, above, n. 3.

⁹ J. Geffcken, *R.E.*, Suppl. v (1931), col. 841 takes Palladas' authorship for granted; W. Peek, *R.E.* xxxvi (1949), col. 160 leaves the question open.

¹⁰ Geffcken, loc. cit., see below, p. 91, n. 11.

¹¹ Geffcken, loc. cit.; O. Weinreich, *Würzb. Jbb. für die Altertumswissenschaft* (1946), 116; S. G. P. Small, *Yale Class. Studies* (1951), 100; 112; see below, p. 91, n. 1.

In view of this it does not seem justified to trust the *Anth. Plan.* implicitly, as far as the tradition of either Callimachus or Rufinus is concerned. Although no general rule can be given, Planudes is on the whole rather less reliable than the *Anth. Pal.*¹ In a dubious case such as this, and as long as no observation of style, metre, etc., recommend an attribution as reasonably certain, it is not safe to follow Planudes. We shall see below (pp. 90 f.) that an error is more likely to have occurred in the *Anth. Plan.*

Pfeiffer has pointed out, however, that the epigram deals with an *argumentum certe a Callimacho alienum*. This is true. Among his erotic epigrams, it is the only one that is addressed to a woman, while all the others reflect the poet's φιλόπαις νόκος.² One might conclude from this observation, as Wilamowitz did³, that the theme of *Ep.* 63 is merely a τόπος; but this conclusion applies to a great many erotic epigrams; very few of the poems included in *Anth. Pal.* v and xii are necessarily based on personal experience. An *argumentum ex silentio* is not convincing; it may be partly coincidence that not more of Callimachus' love-poems have survived. Pfeiffer is right when he adds that most of Rufinus' epigrams deal with such concrete situations as we find in *Ep.* 63. He likes to name his mistresses,⁴ and he likes significant names—there is usually a Prodice, or Melissa, or Rhodocleia involved⁵—so that we could easily give him credit for the amusing 'Conopion'. But so much of this is obviously cliché, literary convention.

Callimachus was a conscious craftsman, known for his careful choice of words.⁶ According to Pfeiffer's *Index Vocabulorum*, five words out of the epigram's thirty-eight do not occur anywhere else in Callimachus' remains: ὑπνώ, ψυχρός, ἐραστής, ἔλεος, ὄναρ.⁷ But in another epigram of approximately the same length, *Ep.* 48, three words are ἀπαξ λεγόμενα (ἀναχαίνω, τραγικός, ἐπήκοος, but cf. *Fr.* 499. 1 ἐπακούος); there are four in *Ep.* 8 and three in *Ep.* 25, itself an erotic poem. Generally speaking the choice of words is less restricted in epigrammatic poetry than in other literary genera; colloquialisms, technical terms,⁸ words that the more elevated or restrained style of hymn or elegy would have excluded, were perfectly admissible. Furthermore, none of the five words listed above is found in Rufinus, except the idiom οὐδ' ὄναρ (Rufinus, *Anth. Pal.* 5. 76. 4), but this occurs already in Philodemus⁹ (*Anth. Pal.* 5. 25. 6), more than a century before Rufinus.¹⁰

Pfeiffer maintains that the style (*color dicendi*) is not Callimachean, whereas the characteristic use of the figure of repetition reminds him of Rufinus' technique. The repetitions in our epigram are actually not all of the same kind. Either the same thought is expressed by different words (v. 1 ὑπνώσας, v. 2

¹ 'Planude avait plus d'ingeniosité que d'exactitude', Waltz, *Anth. Gr.* i (1928), p. 1; Planudes' anthology is based on the collection of Constantine Cephalas, but not on our manuscript of that work (Heidelberg. Gr. 23 + Paris. Suppl. Gr. 384), C. Wendel, *R.E.* xl (1950), col. 2236.

² Call. *Ep.* 46. 6.

³ Wilamowitz, *Hellen. Dicht.* i (1924), 171.

⁴ e.g. *Anth. Pal.* 5. 9; 12; 14; 22; 27, etc.

⁵ Similar names formed with the prefix Rhodo- are often literary fiction, see A. Barigazzi, *Rendic. Ist. Lomb.* lxxv (1941-2), 429.

⁶ On his theory of style in general see

E. Reitzenstein, *Festschr. R. Reitzenstein* (1931), 23 ff.

⁷ But ὑπνω, ἐπάω (*passim*) and ὄνειρα (*Ep.* 48. 6), ὄνειρος (*Ep.* 32. 2) occur; as in *Ep.* 63, the last word is used proverbially (cf. Plato, *Rep.* 8. 563 d; Cic. *ad Att.* 6. 9. 3).

⁸ e.g. *Ep.* 25. 5 f. οὐ λόγος οὐδ' ἀριθμός, *Ep.* 8. 6 βραχυκυλλάβη, etc.

⁹ Or Meleager? (Geffcken, *R.E.* xxix [1931], col. 483), but E. Bickel, *Paideia* (1952), 272, follows the attribution of the MS. and ascribes it to Philodemus.

¹⁰ Recently dated by R. Keydell, *Hermes* (1952), 500 around A.D. 100.

κοιμᾶσθαι, v. 4 κοιμίζεις, v. 4 ἐλέου, v. 5 οἰκτεῖρουσι); or the same word or group of words is repeated (v. 1 and 3 ὑπνώσας, v. 4 and 5 οὐδ' ὄναρ). Such repetitions are found throughout the history of the Greek epigram, and Callimachus is no exception.¹ On the other hand, it is difficult to find an exact parallel among the examples from Rufinus which Pfeiffer enumerates. *Anth. Pal.* 5. 14 is not merely a play on repeated words, but also on their different endings² (v. 1 χεῖλος, v. 3 χεῖλεσιν; v. 2 ψαύει, v. 3 ψαύει). In *Anth. Pal.* 5. 22, only the prefix αὐτο- is repeated, and *Anth. Pal.* 5. 87. 3, with a curious sound-effect, has three successive words all beginning with the same syllable. *Anth. Pal.* 5. 93 is more of a case in point (v. 2 μῦθος, v. 4 μόνος; v. 3 θνατός δ' ἀθανάτω), but it employs the repetition mainly for the sake of clarity. Repetition also serves a logical function in *Anth. Pal.* 5. 97. In one case Rufinus consciously avoids a repetition of the type found in our epigram, by changing *Anth. Pal.* 5. 103. 1 μέχρι τίνος to ἄχρι τίνος at the end of the line.

The figure of *Anadiplosis* is used with much greater liberty and variety in Callimachus' epigrams. It adds an ironical note in *Ep.* 25. 1 and 3; it underlines the point of an anecdote in *Ep.* 1. 12 and 16; it lends a conversational touch³ to *Ep.* 29. 3 f., 30. 1, 44. 1, and 45. 3 f. An erotic epigram, *Ep.* 42, offers a complex system⁴ of repeated sounds, words, and ideas—surely, as has been pointed out,⁵ a very striking parallel to our *Ep.* 63. In both epigrams the repetitions suggest the same mood of melancholy *bonhomie*.

Since the style of our epigram does not exclude Callimachus' authorship, we should ask whether it conforms to the rigorous metrical rules which Callimachus and other Hellenistic poets had set for themselves. P. Maas⁶ has formulated and listed them conveniently; it seems, therefore, unnecessary to repeat them here. A metrical analysis of the poem shows that while no major rule is violated, some irregularities do occur.

Hexameters beginning with three consecutive spondee (v. 1) are rare in Callimachus. He avoids, as a rule, lines with more than two consecutive spondees, and the third foot of his hexameter is almost always dactylic. There is no other instance in his epigrams, but two in Rufinus, *Anth. Pal.* 5. 14. 3 and 5. 37. 3. Pfeiffer, however, rightly ignores this argument. Whenever Callimachus aims at a special effect, he feels free to disregard certain metrical rules.⁷ Lines of the type described above occur in the *Hymns* (2. 45, 6. 110). It is true that the rules applying to hexametrical poetry are not necessarily valid for elegiac verse, and vice versa. But in our epigram, as E. Norden⁸ has suggested, the

¹ Geffcken, *Jbb. Phil. Suppl.* xxiii (1897), 65; *R.E.* xxiv (1925), col. 2029; O. Knauer, *Asklepiades von Samos* (Diss. Tübingen, 1933), 44.

² This is, to use the proper rhetorical term, not only *Anadiplosis*, but also *Polyp-ton*; a similar arrangement is found in Meleager, *Anth. Pal.* 5. 171.

³ 'Bucolic' repetition is found in *Ep.* 22. 3, see Pfeiffer's note on *Fr.* 27. 1; a well-known example of this technique is Sappho, *Fr.* 120 D.³ (cf. Demetr. Phal. *De Eloc.* 146).

⁴ The terminology of this epigram suggests a parody on the Stoic distinction between *προπρέτεια* and *ἐμπροπρία*, see G. Kaibel, *Hermes* (1897), 267 f.; V. Hoelzer, *De Poesia*

Amat. a Com. Att. Exculata (1899), 59 f. Its final line, v. 6 εἰ τοῦτ' ἔστ' ἀδίκημα, ἀδικέω reminds one of the *Antanaklasis* in *Ep.* 51. 4 ἄνδρες οὐδ' αὐταὶ τὰι Χάρπτες Χάρπτες.

⁵ Knauer, op. cit. 44.

⁶ P. Maas in Gercke-Norden, *Einleit. in die Altertumswissenschaft*, i (1927), fasc. 7, pp. 22-32 and 'Nachträge', 8 f.; on the metric of Callimachus' epigrams in particular see the observations of K. Müller, *Die Epigramme des Antiphilos von Byzanz* (1935), 22 ff.

⁷ Maas, *ibid.* 30 f.; H. Herter: *R.E.* Suppl. v (1931), col. 444 f.

⁸ E. Norden, *P. Vergilius Maro, Aeneis, Buch VI*⁸ (1934), 422.

accumulation of *longae* probably emphasizes the soft, secure slumber of Conopion, as contrasted with the poet's restlessness.¹

As Pfeiffer observes, the *correptio* of the vowel η in v. 3 is found in Rufinus (cf. *Anth. Pal.* 5. 9. 1 and 35. 4), but, we should add, nowhere in Callimachus' epigrams. *Correptio* of diphthongs occurs four times in the epigrams (*Ep.* 5. 9 and 11, 13. 1, 62. 2). In hexametrical poetry, the *correptio* of η is possible,² whereas in elegiac verse, there seem to be only two dubious cases.³ But since Callimachus occasionally violates an even stricter rule, according to which in elegiac verse a diphthong or *longa* in the first syllable of the *thesis* may not be shortened before a vowel,⁴ the irregularity of *Ep.* 63. 3 seems *a fortiori* permissible.

To sum up, there is no valid stylistic or metrical criterium which would definitely eliminate Callimachus as the author of our epigram. The only real difficulty is the testimony of the *Anth. Plan.* Since the reliability of the Planudean tradition cannot be disproved on external grounds (above, pp. 87 f.), we should study some of the conditions under which an error in attribution usually occurs.

The error may have been purely mechanical. Our epigram is preceded in the *Anth. Plan.* as well as in the *Anth. Pal.* by an epigram of Rufinus.⁵ In the *Anth. Plan.*, but not in the *Anth. Pal.*, the following epigrams are also by Rufinus.⁶ In such a series of epigrams by the same author, it often happens that the copyist overlooks the fact that an epigram by a different author interrupts the series, and mechanically writes $\tau\omicron\upsilon\ \alpha\upsilon\tau\omicron\upsilon$.⁷ Thus, if there was a mechanical error, it most likely occurred in the *Anth. Plan.*

On the other hand, the 'learned' conjecture of a copyist or reader may have been responsible for the confusion. It happens sometimes, as in the case of *Anth. Pal.* 6. 269 $\acute{\omega}\varsigma\ \Sigma\alpha\mu\phi\omicron\upsilon\varsigma$,⁸ that an anonymous epigram is more or less arbitrarily attributed to a well-known author. But more often the conjecture is based on similarities of theme and style. *Anth. Pal.* 7. 189 has been attributed to Anyte (by Planudes!) because it resembles Anyte's *Anth. Pal.* 7. 190, but it is surely the work of a skilful imitator,⁹ probably, as the *Anth. Pal.* has it, of Aristodicus of Rhodes.¹⁰ Another epigram, *Anth. Pal.* 7. 492, attributed to Anyte by the *Anth. Pal.*, actually belongs to Antonius Thallus,¹¹ but Anyte had made the motif famous.¹² The beginning of Marcus Argentarius, *Anth. Pal.* 5. 90,

¹ A similar example is Anyte, *Anth. Pal.* 7. 202. 3; on this epigram see G. Luck, *Museum Helveticum* (1954), 179 f.; on the metrical problem G. Herrlinger, *Totenklage um Tiere in der antiken Dichtung* (1930) 18; Knauer op. cit. 43.

² e.g. *Hy.* 4. 156 $\phi\iota\lambda\omicron\varsigma\epsilon\iota\omega\tau\acute{\alpha}\tau\eta\ \acute{\alpha}\lambda\lambda\omega\upsilon\varsigma$; 325 $\iota\epsilon\tau\eta\ \acute{\omega}$; 6. 86 $\eta\ \acute{\epsilon}\nu\ \dots$.

³ *Fr.* 43. 62 $\epsilon\rho\omega\delta\iota\sigma[\epsilon\ \epsilon\iota\ \mu\grave{\eta}\ \acute{\epsilon}\phi\acute{\epsilon}\lambda]\rho\pi\epsilon\iota$ (see Pfeiffer's note), and *Hy.* 5. 61 $-\cup\cup-\cup\cup-\cup\cup\ \eta\ \acute{\epsilon}\iota\varsigma$; hiatus would be improbable in an elegiac poem, see Pfeiffer's note and his remarks *Add. ad vol. II*, p. 125.

⁴ *Ep.* 62. 2, *Hy.* 5. 71 and perhaps *Fr.* 43. 62 (above, n. 3), see Pfeiffer's note on *Fr.* 535.

⁵ *Anth. Plan.* 7. 139 = *Anth. Pal.* 5. 19; *Anth. Pal.* 5. 22 = *Anth. Plan.* vii. 147.

⁶ *Anth. Plan.* 7. 141 = *Anth. Pal.* 5. 35. 9 f.

(vv. 1-8 omitted *verecundiae gratia*); *Anth. Plan.* 7. 142 = *Anth. Pal.* 5. 36, etc.

⁷ An interesting case is discussed by M. Boas, *Rhein. Mus.* (1907), 68 ff., but his conclusions are not valid, see G. Luck, op. cit. 173; on this type of error in general P. Waltz, op. cit., p. li, n. 4 who quotes our epigram as an example.

⁸ Geffcken, *N. Jbb.* (1917), 103, n. 1; Luck, op. cit. 170 f.

⁹ This imitator tried to cover his lack of originality by the artificial position of words in v. 4, cf. Leon. Tar. *Anth. Pal.* 6. 154; Knauer, op. cit. 40; and in general Norden, op. cit. 393-8.

¹⁰ Luck, op. cit. 173.

¹¹ Ibid.

¹² The antithesis Hades-Hymenaeus: see *Anth. Pal.* 7. 486; 490; 649.

resembles Rufinus, *Anth. Pal.* 5. 74; this is no doubt the reason why Planudes wrongly ascribes it to Rufinus.¹

It is not difficult to understand why an ancient reader should have been tempted to attribute our epigram to Rufinus. There was no other *paraklausithyron*² by Callimachus, but a very similar one by Rufinus, *Anth. Pal.* 5. 103. Some of its motifs reappear in Rufinus, *Anth. Pal.* 5. 74 and 92. The main theme³ of *Ep.* 63, the fading of beauty, as the haughty courtesan's punishment,⁴ is frequently treated in Rufinus' epigrams.⁵ Among the thirty-six epigrams that can be safely attributed to Rufinus, no less than six contain one or several parallels to our *Ep.* 63. It looks as though he had made small change of one comprehensive theme and spent his coins whenever he needed an idea or an image, so that any moderately attentive copyist or scholiast could not help associating these themes with Rufinus.

Rufinus is a skilful versifier, not a great poet. Any striking thought or image in his epigrams seems to be imitation or adaptation. There is enough evidence to show that he was thoroughly familiar with Callimachus, whose influence on the history of the later Greek epigram cannot be underestimated. As Weinreich⁶ has pointed out, there is at least a formal parallel between Rufinus,⁷ *Anth. Pal.* 5. 42. 1 *μῶν τὴν ἀφελή, μῶν τὴν κόφρονα λίαν* and Callimachus' famous *Ep.* 28 *ἐχθαίρω τὸ ποίημα τὸ κυκλικόν . . . μῆναι καὶ περιφοῖτον ἐρώμενον*. The graphic description of the symptoms of love in Callimachus' *Ep.* 30 is amplified by Rufinus, *Anth. Pal.* 5. 87.⁸ The theme of Rufinus, *Anth. Pal.* 5. 93 (love and wine are stronger than reason) appears in epigrammatic poetry for the first time in Callimachus' *Ep.* 42, whose terminology⁹ suggests that Callimachus, like Rufinus, offers excuses for his lack of will-power. A line from Callimachus' *Ep.* 45 *ἦλθεν ὁ βοῦς ὑπ' ἀροτρον ἐκούσιος*, has been adapted by Rufinus, *Anth. Pal.* 5. 22. 1 ff.¹⁰ Callimachus had praised, in *Ep.* 51, Berenice as the fourth Charis; Rufinus, *Anth. Pal.* 5. 70, borrows this image for his compliment to the courtesan Phile. This last example alone would be sufficient to prove Callimachus' influence on Rufinus.¹¹

Compared with Rufinus' poetry, our epigram is a charming little piece of

¹ But Rufinus does not like girls who use perfume, see *Anth. Pal.* 5. 18, and only in Marcus Argentarius do we find the metonymical use of *μυρόν*, see *Anth. Pal.* 5. 113; 118; Weinreich, loc. cit., for another example see below, n. 11.

² On this type of poem see F. O. Copley, *T.A.P.A.* (1942), 96 ff.; P. Maas, *R.E.* xxxvi³ (1949), col. 1202; Maas, incidentally, does not question the Callimachean authorship of our epigram.

³ See in general Knauer, op. cit. 20; A. Wilhelm, *Wiener Studien* (1949), 140 f.; Small, op. cit. 118; A. La Penna, *Athenaeum* (1949), 152, and add to their lists *Anth. Pal.* 12. 160 (anon.).

⁴ Call. *Fr.* 195. 22 (see C. M. Dawson, *A.J.P.* 1946, p. 14; 27) *ὥς δ' ἂν σε θωπὴν λάβοι*, perhaps summing up a series of obscure threats is a rather distant and inconclusive parallel.

⁵ *Anth. Pal.* 5. 21; 27; 74; 76; 103. The

image of the grey hair is characteristic for Rufinus, see *Anth. Pal.* 5. 21 (an imitation of Strato, *Anth. Pal.* 12. 229, see Keydell, op. cit. 499); 76; 103.

⁶ O. Weinreich, *Die Distichen des Catull* (1926), 53 ff. with a list of similar 'Hassepi-gramme'.

⁷ M. Boas, *Philol.* (1914-16), 15 f. and others have attributed this epigram to Honestus, but see Keydell, loc. cit.

⁸ Call. *Ep.* 43; Asclep., *Anth. Pal.* 12. 135.

⁹ See above, p. 89, n. 4.

¹⁰ On this parallel see F. Leo, *Plautinische Forschungen*³ (1912), 155.

¹¹ See P. Waltz, *Anth. Gr.* ii (1928), 46, n. 3. The same motif appears in *Anth. Pal.* 5. 95. 1, an epigram which Planudes, no doubt because he noticed this resemblance, attributes to Rufinus; this is another striking example of a 'learned' conjecture proved wrong (Geffcken, loc. cit. [n. 8]).

work.¹ We find in it a softened, legato touch and an elegiac wistfulness which do not seem conventional because of the humour and pathos with which they are invested. Even if we did not have the testimony of the *Anth. Pal.*, accepted by all modern scholars except Pfeiffer, it would be difficult to ascribe it to the same Rufinus who has written *Anth. Pal.* 5. 103, with its weak, shapeless rhetoric and its clumsy ending—obviously an imitation of *Ep.* 63 that tries desperately to be original.

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¹ *Totum carmen ceteris Rufini epp. in AP servatis paulum praestare mihi videtur* (Pfeiffer, ad loc.).

Addendum.—After this article went to press, I realized that F. Zucker, *Philol.* (1954), 94 ff., had already tried to re-establish Callimachus' authorship of *Ep.* 63 against Pfeiffer's objections. I think I should at least mention his paper, because he has developed one or two formal criteria which I have not emphasized above.

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PHANIAS

NOTES AND QUERIES

THE last epigrammatist named by Meleager¹ as contributing to his *Garland* is Phantias, who, with Meleager's customary irrelevance, is said to be represented there by cornflowers (κύαντοι). No inferences can be drawn from his place in the catalogue, which is neither chronological nor topographical in arrangement, and with one possible exception the epigrams give no hint of his home or date. In *A.P.* 6. 299. 4 Phantias uses the word δρύπνα for an olive which has begun to turn black, and both Pliny and Athenaeus² assure us that this is a Latin word. If so, it is strange that Phantias should use it, but it would be equally strange that these two authorities should make the assertion if it were not true; and if it is true one would be inclined to credit Phantias with a knowledge of Latin implying at least some length of residence in Italy, and with a *floruit* perhaps as late as is consistent with his presence in Meleager's team.³

Be this as it may, the *Anthology* contains seven or eight epigrams⁴ by Phantias, from which we learn that some later epigrammatists thought him worth imitating,⁵ and that he himself was an imitator of Leonidas who enjoyed, like his master, making lists of objects and tricking them out with whimsical epithets. Since the objects listed are sometimes corrupted by scribes and are often unfamiliar to us, and the adjectives seldom help much to define them, the epigrams present a good many difficulties. Of the six in this style four pretend to be dedications and are therefore in Book 6 of the *Anthology* (294, 295, 297, 299), and they have attracted to themselves two more in the same manner (304, 307) which are not dedicatory and should be in Book 9. Except for one word the fish in 304 stand in no need of help unless from ichthyologists, and I can do nothing for the comestibles in 299 or the gardener's tools in 297. Those of schoolmaster, scribe, and barber in 294, 295, 307 can, I think, be elucidated a little.

¹ *A.P.* 4. 1. 54.

² *N.H.* 15. 6. *optima autem aetas ad decerpendum inter copiam bonitatemque incipiente bala nigrescere, cum uocant druppas, Graeci uere drypetidas*, *Ath.* 2. 56 A (citing from *Eupol. fr.* 312 δρυπνεῖς ἐλάει) ταύτας Ῥωμαῖοι δρύπνας λέγουσι. The Greek word occurs (from Phantias) in *Suidas* but nowhere else unless it is concealed in δρύπνιος ὄψος in an inscription of Roman date, *I.G.* ix. 1. 61. 20 (which in view of the meaning of the noun seems unlikely); *druppa* is used elsewhere by *Pliny* (12. 130, 15. 26, 17. 230, 19. 79), but by him only.

³ The phrase in the epigram is ἄ τ' ἐφιολεκίς | δρύπνα. Emendators have made nothing of the epithet, and I am almost ashamed to record that I have sometimes wondered whether Latin may not have something to say to it as well as to the noun. At

any rate *hiulcus* ('split', χάσκων) would make excellent sense in the context.

⁴ *A.P.* 7. 537 is headed in *A.P.* Φανίου γραμματικοῦ but in *Plan. Θεοφάνους*. It is probably unimportant that the author of the other epigrams is nowhere called γραμματικός and certainly unimportant that this is the only epitaph among the eight, but *Planudes'* mysterious ascription to *Theophanes* casts a shade of doubt on the authorship. *Plan.* also ascribes 7. 539 (*Perses* in *A.P.*) to *Theophanes*. Both these epigrams are in a firmly Meleagrian context, the only known poet named *Theophanes* is the Byzantine author of *A.P.* 15. 14, 35, but there may of course have been others for the name is not rare.

⁵ *Philippus* in *A.P.* 7. 383. 3 f., 6. 104. 1 f. borrows phrases from 6. 294. 4, 297. 3 f.; 6. 191 is an adaptation by *Cornelius Longus* of 299.

- A.P. 6. 294 Σκίπωνα προποδαγὸν ἱμάντα τε καὶ παρακοίταν
 νάρθηκα, κροτάφων πλάκτορα νηπιάχων,
 κίρκον τ' εὐόλπαν φιλοκαμπέα καὶ μονόπελμον
 συγχίδα καὶ στεγάναν κρατὸς ἐρημοκόμου
 5 Κάλλων 'Ερμεία θέτ' ἀνάκτορι, σύμβολ' ἀγωγᾶς
 παιδείου, πολὺ γυῖα δεθεῖς καμάτῳ.

1 παρακοίταν *apogr.* -κείταν P πανα- Suid. s.v. νάρθηξ 4 στεγάναν Suid. s.v. συγχίδα
 στενάγ- P

What earlier commentators made of 3 we need not here consider, for since the recovery of Herodas we have known that the schoolmaster Lampriscus in 3. 68 sends for ἡ βοῦς κέρκος¹ to flog the incorrigible Cottalus, and the only question is whether Suidas, which gives οὐράν among the glosses for κίρκον (citing this line), is valid evidence for the spelling κίρκον or whether we should accept κέρκον from Stadtmueller, who further suggested τε σκολίαν to follow it. This is not attractive, and the truth, I think, lies nearer. Lampriscus calls his κέρκος τὸ δριμύ σκύτος, and like all hide or leather it would need to be kept in condition. I suggest therefore ἐξ ὅλης φιλοκαμπέα 'suppled'² by use of the oil-bottle'. Ὀλπα is the name by which some Dorians at any rate knew what Athenians called λήκυθος³—the receptacle for oil carried by athletes and others to palaestra and bath. If Callon, besides being conscientious in the upkeep of his implements, was cynical enough to use his pupils' oil for the purpose we may come one letter nearer and write ὁλπᾶν.

The sandal which has lost a layer of sole, or had only one to begin with, is, as Jacobs saw, another instrument of correction, the more serviceable when thin and therefore pliable.⁴ Except therefore for the first and last, stick and skullcap, the objects here mentioned are all for inflicting corporal punishment.⁵ The stick however puzzles me a little, for if Callon is now infirm (6) he might be supposed to need it in retirement. I do not know whether a pointer for tracing the lines of letters or diagrams, or drawing them in sand, could be meant. It is true that a pointer leads the eye not the foot, but in this style that is no

¹ I doubt whether L. and S. is right in classing κέρκος here with Ar. *Thesm.* 239, Hdas. 5. 45; and Beazley calls my attention to a hydria by the Phiale Painter in the British Museum (C.V. III. i. c, pl. 80. 4) and a pelike in the manner of the Washing Painter in Leningrad (*Annali*, 1870, pl. R). On the first a woman gives a dancing lesson to small girls; on the second, one dwarf superintends another at the punching bag. Woman and first dwarf carry looped over the hand what looks like a (presumably boneless) tail.

² Phantias is fond of coining (and maltreating) adj. in φιλ-: 295 φιλόρπιος, 297 φιλόδουπος, 304 φιλακανθίς, 307 φιλέθερος. None occurs elsewhere. Φιλόλιχνος in 295 is borrowed from Leonidas (6. 302) and misused. The noun to which φιλακανθίς is attached is χαλκίς, 'sardine', and the meaning is 'full of bones', not, as L. and S. would have

us believe, 'fond of thorn bushes'.

³ Ath. 11. 495 c.

⁴ The literary evidence for this use of the sandal is late—Luc. *D. Deor.* 11. 1, 13. 2, *Hist. Conscr.* 10, *Philops.* 28, A.P. 10. 55, Juv. 6. 612; cf. Hsch. s.v. βλαντροῦν. The monumental goes back to the sixth century; see *Ath. Mitt.* 30. 399, to which Beazley enables me to add B.C.H. 60. pl. 21, Neugebauer *Ant. in deutsch. Privatbes.*, pl. 78, Vorberg *Ars Erot.* pll. 13 ff., Caskey and Beazley *Attic Vases in Boston* ii. 2. Grasped at the heel-end a sandal makes a good improvised weapon and is sometimes also used as such; see Ar. *Lys.* 657, Turpil. 147 Ribbeck, Ter. *Eun.* 1028, Pfühl *Mal. u. Zeichn.* fig. 406.

⁵ If παρακοίταν is right in 1 I take it to mean that *ferula* lay next to lash in the schoolroom, not 'that lay ever ready to his hand' (Paton) and still less 'son arme de chevet' (Waltz).

objection, and indeed προποδη, in the only other place in which it occurs¹ is applied figuratively to Socrates δαιμόνιον.

A.P. 6. 295 Σμίλαν Ἀκεστώνδας δονακογλύφον, ὃν τ' ἐπὶ μισθῷ
 σπόγγον ἔχεν καλάμων ψαίστορ' ἀπὸ Κνιδίων,
 καὶ σελίδων κανόνισμα φιλόρθιον, ἔργμα τε λείας
 σαμοθέτω, καὶ τὰν εὐμέλανον βροχίδα,
 5 κάρκινά τε σπειροῦχα, λεάντειράν τε κίστην,
 καὶ τὰν ἄδυφαῖ πλινθίδα καλλαινάν,
 μάζας ἀνίκ' ἔκυρσε τελωνιάδος φιλολίχνω
 Περσίον πενίας ἄρμεν' ἀνεκρέμασεν.

4 εὐμέλανον Salmasius ἐν μέλα. νο P

7 φιλολίχνω Hecker -νου P

A scribe who has landed a snug little job in the excise (7) dedicates the implements of his former trade to the Muses. There are seven other such lists of writing materials in the sixth book of the *Anthology*, and for brevity of reference I shall denote them by letters. They are: A. 62, Philippus; B. 63, Damocharis; C. 64, Paulus Silentiarius; D. 65, id.; E. 66, id.; F. 67, Iulianus Aegyptius; G. 68, id. All are later than Phantias, and all but the first very much later, but writing implements do not change much or rapidly and this evidence may be used without serious qualms.

The serious difficulties here are λεία (3) and πλινθίς (6). Leaving them for the moment I record the other items in the list together with the epigrams which also mention them: penknife (1: A-G); sponge (2: DE); ruler (3: A-G); inkpot (4: BCDEG; ink in F); compasses (5); pumice (5: AEF). The phrasing is difficult in places. In 1 ἐπὶ μισθῷ, however surprising, must mean that he hired the sponge, not, as Waltz, 'pour mériter son salaire'; and in 2 ἀπό can be construed, 'hired from the proceeds of his penmanship'.² This is not very satisfactory (for if the man was so poor that he had to hire one of his tools one would not have expected it to be the sponge), but it has the advantage of leaving the sponge to serve, as it does in D and elsewhere,³ as an eraser, not as the penwiper which most have made it, either by supposing, with Salmasius, that ψ. ἀπο meant ἀποψαίστορα or by altering, with Brunck, ἀπό τοῦ. In 5 σπειροῦχα has been translated 'spiris tornandis', 'that draw circles', 'avec leurs étuis' ('circle-holding, ring-holding').⁴ Drawing circles is no normal occupation of a scribe, and though his compasses might be described as circle-drawing⁵ by an *epitheton ornans* their principal use is as dividers to secure equality of spacing between both lines and columns.⁶ I suggest that the σπείρα though not so used elsewhere, may perhaps be a screw holding the two limbs of the compasses together. Whether Phantias would dare to use an adj. in -οῦχος in a passive sense ('screw-held') I will not guess, for 'screw-containing' would serve. Λεάντειραν perhaps means that the pumice is used to smooth the papyrus or vellum,⁷ but in F it is used for sharpening the pen-point, and it may be noted

¹ Plut. *Mor.* 580 c.

² For Cnidian reeds used for pens see Plin. *N.H.* 16. 157, Auson. *Epist.* 15. 50 Peiper.

³ Mart. 4. 10, Suet. *Aug.* 85, *Calig.* 20.

⁴ Here and hereafter the Latin, English, and French versions are by Boissonade (in Duebner), Paton, and Waltz respectively; those in brackets from L. and S.⁹.

⁵ If however we allow that σπείρα might

mean 'circle' this, as Page points out to me, should be σπειροῦλέα.

⁶ See Gardthausen *Gr. Palaeogr.* 2 i. 184, and on ancient compasses Daremberg and Saglio, i. 1186.

⁷ The Latin references (for which see Orelli on Hor. *Epist.* 1. 20. 2) seem to refer to the outside of the book, and Martial (14. 209) speaks of a shell for smoothing the writing surface of papyrus.

that BCDG mention λίθος and ἀκόνη to serve this purpose and do not expressly mention or imply pumice. Λεάντειραν might at least cover that use.

To return to 3 f. and 6. Ἐργμα (or ἔργμα) λείας σαμοθέτω is translated 'et sepem ponderis signatorii', 'paper-weight that marks the place',¹ 'cachet qui servait à lisser les feuilles et à sceller les écrits'. Boissonade did not explain his rendering, but I think it was much nearer the truth than the others. Phantias might be expected to mention a highly important piece of scribal equipment which finds a place in the first couplet of all the seven other epigrams—the disk of lead used for ruling the lines for the writing and for the boundaries of the columns.² Λεία is in Soph. fr. 531 a stone-mason's smoother, but it is also another way of writing λαία, 'weight', usually no doubt, but not necessarily, of stone.³ I suggest that the words mean 'fence for the mark-making⁴ weight', that the ruler is described twice over, first in its relation to the writing surface as σελίδων κανόνισμα, and secondly in relation to the lead as ἔργμα λείας (the thing which prevents the line from trespassing), and that in this style λ. σαμοθέτος is a reasonable description of the lead disk. The ruler is elsewhere described as γραφίδων ἰδυτάτων φύλακα (B), γραμμῆς ἰδυπόρου ταμίην (C), ἡγεμόνα γραμμῆς ἀπλανέος (D), τροχαλοῖο κυβερνητήρα μολύβδου (E), μολίβου σὺνδρομον ἡμοχῆα (F), μολίβω . . . τύπον ὀρθὸν ὀπάζων (G).

The object which we may provisionally call 'the pleasantly shining green-blue bricklet' in 6 presents more serious difficulties, on which the other epigrams throw no obvious light. The versions are 'suavi-nitidum-colore laterculum', 'his blue spectacles',⁵ 'cette plaque de turquoise qui adoucit la lumière' ('paper-weight?'). Jacobs favoured the view that it was, as Guyet suggested, a (gaily-coloured) knife-sharpener. These guesses need not be scrutinized in detail for all suffer from the same fatal defect. In these epigrams the dedicator, here called Acestondas, is not an individual but a type, and the objects he is alleged to dedicate must therefore all be what every scribe necessarily possessed, not things which a particular scribe might chance to possess. Since I cannot prove my case I shall state my guess baldly. I think that this is a block of the material from which the scribe will grind and make his ink. Long after this time ink was sold by weight⁶ and therefore in solid form, and πλωθίς, 'bricklet' or 'tablet', would be an admirable word to describe the form in which Indian ink may still be bought by those who prefer to grind their own. The adjective καλλάιναν however presents an obstacle. Callais (Plin. N.H. 37. 151) is a greenish blue stone, probably turquoise,⁷ and the adjective to which it gives or owes its name is used to translate *uenetus*, and is applied among other things to Egyptian faience. If therefore copper sulphate had been an ingredient of ancient as it is of modern inks it would have supplied an answer; but it was not, and we must look further. The following entries in lexicographers will perhaps advance us: *Et. M.* 486. 45 κάλλαια· καλοῦνται τὰ κάτωθεν τῶν ἀλεκτρυνόνων ὥσπερ γένεωι διὰ τὸ εἶναι ἀνθηρὰ καὶ πορφυράδη· τὰ πορφυρὰ γὰρ κάλλη ἐκαλοῦντο (examples of κάλλη). ἔνθεν καὶ τὸ καλλάνων· ἔστι δὲ χρώμα ἀνθηρόν ἢ τὸ βέετον χρώμα οὕτω λεγόμενον, Hsch. κάλλαια· οἱ τῶν ἀλεκτρυνόνων πώγωνες, καὶ πᾶν πορφυροειδὲς χρώμα· ἐνιοὶ δὲ τὰ ποικίλα, καὶ παρ' Αἰγυπτίοις χρώμα καλλάνων,⁸ Suid. κάλλη· τὰ

¹ This from Lobeck *Paral.* 313.

² Gardthausen 183.

³ Hero *Aut.* 2. 6 λεία μολιβῆ.

⁴ If this is right, accent as well as meaning needs correction in L. and S.

⁵ This from Schwarz, via Jacobs.

⁶ Gardthausen 203.

⁷ See Bluemner *Techn.* iii. 248.

⁸ Schmidt said that what followed πώγωνες was due to a confusion between κάλλαια and κάλλεα or else should be transferred to κάλλη six entries later.

πορφυρᾷ ἱμάτια· καὶ κέραμος καλλάνιος. Vague and imprecise as is ancient colour-nomenclature it is surprising that the same adjective should denote both green-blue and crimson, but if it never denoted anything but the former it would never have been connected with a cock's crimson wattles. Whether in the sense of crimson it derives from κάλλαια or should be written καλλαιικός¹ I will not determine, but I think that, if nowhere else, it has that meaning here. Ancient scribes used red ink as well as black² and I suggest that what Acestondas dedicates is a block of the material from which, as and when he required it, he made his red ink. Its gay colour would appropriately earn it the epithet ἀδυφαῖ, and among objects which every scribe must necessarily have by him I cannot think of another of which that could be said.

Red ink in antiquity has been shown by analysis to be made of cinnabar,³ the preparation of which is described by Theophrastus.⁴ The process was discovered accidentally about ninety years before his time by an Athenian who was trying for gold, and since Theophrastus knew his name it seems likely that it was associated with the new pigment. The name was Callias. Καλλιακόν (or -λειον) and καλλάνιον χρώμα would make a confusing pair; dare I guess that it has something to do with the apparently double meaning of the second adjective? I cap this query with an enigma from Suidas: Κάλαις· ὄνομα κύριον. καὶ καλλάνιον χρώμα.

A.P. 6. 307 *Εὐγάθης Λαπιθανὸς ἐσοπτρίδα καὶ φιλέθειρον
σινδὼνα καὶ πετάσου φάρσος ὑποξύριον
καὶ ψήκτραν δονακίτιν ἀπέπτυσσε καὶ λιποκόπτους
φασγανίδας καὶ τοὺς σιλόνηχας στόνηχας,*

5 *ἔπτυσσε δὲ ψαλίδας, ξυρὰ καὶ θρόνον . . .*

2 φάρσος Toup φᾶρος P 3 λιποκόπτους Suid. s.v. φάσανον- κόπους id. s.v. σιλό-
νηχας 4 στόνηχας Salmasius 5 δὲ ψαλίδας Jacobs δ' Ἰταλίας P

This is a barber⁵ who abandons his shop for philosophy but is driven back to it by starvation. Of the emendations printed φάρσος (a word favoured by Phanias⁶) and στόνηχας seem certain; ψαλίδας probable; the last word in 3 doubtful.

In the first couplet the towel is what the barber puts round the customer's neck when shaving him or cutting his hair.⁷ The third item is less plain. Πέτασος is the broad-brimmed felt hat worn by young men, travellers, and others. Paton translated 'a fragment of his shaving-bowl'; most suppose it to be a strop. Felt however does not seem suitable for this purpose, and I should have thought that the bit of an old felt hat was to protect the razors when laid out for use and to wrap them up when work was over. A ξυροδόκη (or -δόχη) was part of a barber's outfit.⁸ In 3 ψήκτραν is translated

¹ The Latin adjective is *callainus*, but the stone seems to be called both *callaina* and *callaica*.

² Gardthausen 200, 209; E. M. Thompson *G. and L. Pal.* 41.

³ Gardthausen 209.

⁴ *Fr.* 2 (*Lith.*) 58.

⁵ His name is presumably Eugathes, not, as L. Dindorf suggested (*Thesaur.* s.v. Λαπιθη), Lapithanus, for as an epithet *εὐγάθης* would be pointless. Lapi-the was a town in Thessaly, and with all the world to choose from seems an odd choice for the

ethnic of an imaginary character. I do not know whether it could be intended to suggest the temperament of a Lapith; cf. *A.P.* 5. 181. 4 (Asclepiades), Eustath. 537. 42.

⁶ *A.P.* 6. 297. 2, 299. 1.

⁷ Diog. L. 6. 90, Alciph. 3. 30 Sch.; Plutarch (*Mor.* 509 A) calls it ὠμόλιον. *Ἐθεῖρα* relates more naturally to hair than to beard and the adjective presumably means that it is to catch the hair as it falls rather than that it is still full of hairs—anyhow not, as L. and S. say, 'attached to the hair'.

⁸ See Poll. 10. 140.

'strigilem',¹ 'scraper', 'étrille', qui servait à racler le visage pour en enlever le savon' (were the detergents used by the Greeks in place of soap² any use for shaving?). The word elsewhere means 'currycomb' and is a tool of the stables, but it must here stand for 'comb', for Phantias could hardly omit so essential a tool, used not only for arranging the hair but for trimming it when a short cut was not desired.³ One might have expected it to be, like surviving combs, of ivory, bone, or wood (cf. Lat. *buxum*, 'comb') but noun and adjective alike are meant to be disparaging. Φασγανίδας ('cultellos', 'scissors', 'lames') does not occur elsewhere but must be equivalent to μαχαίριδας, and in these words, as in μάχαιραι, the plural is ambiguous and may denote either a plurality of knives or a pair of scissors or shears (which, like *forbici*, *ciseaux*, *Schere*, show the same plural form). Probably scissors are meant, and if λιποκόπτους must, owing to its formation, be denied the wholly apposite meaning 'which will no longer cut', Τoup's λιποκωπους 'without handles' seems the best but much inferior remedy. Στόνυχας is translated 'unguibus-bona-secandis scalpella', 'pointed nail-file', 'canifs à rogner les ongles' ('nail-removing prongs, i.e. nail-scissors'). Στόνυξ however is neither knife nor prong but point, and I should have thought these were pointed implements for depriving the nails (of dirt), i.e. nail-cleaners or nail-picks. The correction ψαλίδας, considering the ease with which ψ and τ may be confused, seems highly probable, for Pollux⁴ says καὶ ψαλὶς δὲ τῶν κουρέως σκευῶν ἦν καὶ μίαν μάχαιραν καλοῦσιν. Μία μαχαίρα κείρεσθαι is a method of getting your hair cut, apparently suitable for more elaborate styles,⁵ and perhaps implies the use of comb and razor, still sometimes employed in place of scissors. At any rate if ψαλὶς = μία μάχαιρα, ψαλίδες is presumably open to the same ambiguity as μάχαιραι, noted above, and might mean several knives or one pair of scissors.⁶ The translators opt for scissors, and I think rightly, for though a pair has been mentioned in the previous line this barber's trade extends to manicule and he will probably want nail-scissors as well as those for cutting hair.⁷ The θρόνος is of course the chair in which the customer sat. It figures together with ἔσοπτρα, μαχαίριδες, σινδών, and ξυρός in the barber's shop of Alciphron. 3. 30 Sch.

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¹ Following Jacobs, who said it was 'ad deradendum smegma quo capillus et barba inungebantur'.

² See R.E. 2 A 1112.

³ Plaut. *Capl.* 268: *utrum strictissime attonsurum dicam esse an per pectinem* | *nescio*.

⁴ x. 140, cf. ii. 32.

⁵ See Blaydes on Ar. *Ach.* 849.

⁶ Cf. A.P. 11. 368 (Iul. Antecess.) σε χρή δρεπάνοις καὶ οὐ ψαλίδεσσι καρῆναι. Ψαλὶς, sing., is in Ar. *fr.* 320 named with ξυρόν and κάτοπτρον among women's gear.

⁷ We are poorly informed on manicure implements, but see Mart. 14. 36, Val. Max. 3. 2. 15. Poll. 10. 140 cites in a list of barber's instruments ὄνυστήρια (ὄνυχισ- Stephanus) λεπτὰ from Posidippus (*fr.* 38) but does not disclose their nature. The αἰθων αἰδηρος of Hes. *W.D.* 743 and the *ferrum* of Ov. *F.* 6. 230 are equally uninformative, and the lion who, in Babr. 98. 13, ὑπὸ σμίλης ἀπανυχίσθη was submitting to a surgical, not a toilet, operation.

II. *A Note on Lucian's Prometheus Es In Verbis*

Lucian's suggestions as to what was meant by the man who called him a literary Prometheus by no means exhaust the possibilities. This is perhaps to be expected, as Lucian's reply to this lawyer is probably a *προλαλία* or introduction to the reading of a major dialogue, and he has merely taken advantage of the fact that he was called a literary Prometheus to do some self-advertisement as the founder of a new literary genre.

When an educated man of the Antonine age heard the name Prometheus, he would, almost certainly, think first of the *Prometheus Vinculus* of Aeschylus, and of his punishment on Caucasus, rather than other features of the story of Prometheus described by Hesiod and by Plato in his *Protagoras*. It may well be, then, that Lucian is being threatened by an enemy with a punishment equally dire at the hands of Zeus, or, possibly, he is being warned by a religious friend that such may be his fate, if he continues to offend the gods. This topic of punishment, however, Lucian merely mentions jestingly in § 3 fin. and briefly, though more seriously, in § 7 init.

Now, a contemporary of Lucian would, I think, consider Prometheus' chief offence against Zeus not to be that he gave him bones wrapped in fat, but that he stole fire and gave it to men. Aeschylus leaves us in no doubt of this in the *Prometheus Vinculus*. In the first speech in the play, *Kράτος* (7-8) says that Prometheus is to be punished for stealing fire and giving it to men, and Prometheus, in his first speech, gives (107-111) the same reason. To find a parallel offence committed by Lucian, we must regard Prometheus' crime from a slightly different viewpoint. When he gave men fire, he was not only guilty of theft, he was also letting men into one of the secrets of the gods. And how many secrets of the gods and their private lives Lucian reveals to men in such works as the *Dialogues of the Gods*, *Zeus Tragoedus*, *Zeus Refutatus*, and *Icaromenippus*! The hatred of Zeus for Prometheus is paralleled by the resentment he would have a right to feel against Lucian, as he, Zeus, is of all the gods Lucian's favourite butt.

A rather less likely possibility is that the suggested reason for the punishment is the displeasure of Zeus with the handiwork of both Prometheus and Lucian. Men, the handiwork of Prometheus, incurred the displeasure of Zeus, because they were the recipients of fire (cf. Hesiod, *Works and Days*, 42-58, and *Theogony*, 565-70). Lucian's handiwork, his dialogues, displease Zeus, because, in them, the gods and, in particular, Zeus himself are made to appear ridiculous.

To sum up, then, Lucian either did not choose to mention, or overlooked the possibility that it was being suggested that he would suffer as severe a punishment as Prometheus, either for revealing secrets of the gods to men, or because his handiwork was displeasing to Zeus, but, in any case, because of the subject-matter of his dialogues.

A CURIOSITY IN SENECA

Vel, si videtur, sit (*sc. Ira*) qualis aput vates nostros [est]
 sanguineum quatiens dextra Bellona flagellum,
 aut scissa gaudens vadit Discordia palla,
 aut si qua magis dira facies excogitari diri adfectus potest.

(*Ad Novatum de ira* 2. 35. 6)

Thus the passage is printed in the Teubner edition of Seneca's *Dialogues* by E. Hermes, who, on the strength of *Aen.* 8. 702 f. ('et scissa gaudens vadit Discordia palla, quam cum sanguineo sequitur Bellona flagello'), adds a note on the quotation 'versus sunt Vergilii a Seneca licenter mutati'.

Now the imputation to Seneca of such gross alteration of Virgil can only be supported if we disregard or eject the evidence to the contrary. As only the last five words are actually Virgilian; as Seneca himself says 'aput vates nostros'; as *aut* at the beginning of the second line may introduce a second quotation (so Rossbach); and as *est*, which Gertz secluded, has a part to play if the lines are by different poets, it is safer to take a step backwards and dispose of the passage thus:

sit qualis aput vates nostros est
 sanguineum quatiens dextra Bellona flagellum
 aut
 scissa gaudens vadit Discordia palla,
 aut si qua magis etc.¹

This is simply to take Seneca's text at its face value; and what objection is there to so doing? It is surely a feat of extraordinary perversity to hold that *vates nostri* means *one* poet—Virgil; to delete, without any manuscript authority, an inoffensive and perfectly intelligible word; and then, because the first line of the resultant couplet is not Virgilian, to accuse Seneca of tampering with, or misremembering, the text of Virgil.

Can we discern the author of the first line? At 7. 568 of Lucan's *Bellum Civile* are the words:

sanguineum veluti quatiens Bellona flagellum.²

Chronological considerations make it unthinkable that this could have been Seneca's source, for Lucan could not have been more than twelve at the most when the *de ira* was written. Is Lucan then to be convicted, on this unique occasion, of a brazen literary theft, whether the line was concocted by his uncle Seneca (which is most unlikely) or is the work of some unknown poet? Plagiarism on this scale is not at all in the manner of the proud and independent Lucan. His reminiscences of Virgil are many, it is true, and he echoes as much as a half-line occasionally (such was common enough practice among Latin poets); but his borrowing of a line entire, with only the alteration of the least significant word, is unparalleled elsewhere in the B.C. Virgil's practice of

¹ Baehrens, who assigned these lines to 'auctores incerti', did recognize this (*F.P.R.*, p. 359).

² The similarity with Lucan's line was

noticed by Kortte; it is also remarked by Bourgery and by Jacques Aymard, *Quelques séries de comparaisons chez Lucain*, p. 29. All take the view that Seneca is adapting Virgil.

borrowing lines of earlier poets has no counterpart in him. Is he likely to have paid some unknown poet a compliment which he withheld from Virgil himself?

There is another possibility. Lucan could, with perfect propriety and with self-respect unimpaired, plagiarize himself, and Seneca may here be quoting from an early work of his nephew a line which the latter used again in his *magnum opus*. This early work might have been the *Iliaca*,¹ which had as its subject the death and ransoming of Hector, a subject which we may suppose was in Seneca's mind when he wrote these lines: for just previously (in chapter 33. 5) he had sketched the scene at the ransoming. It was Lucan's first poem; and Statius speaks as if it were composed in boyhood (*Silv.* 2. 7. 54-56: 'ac primum teneris adhuc in annis ludes Hectora Thessalosque currus et supplex Priami potentis aurum'). His precocity is mentioned in the *Lives* ascribed to Suetonius and Vacca, and symbolized by Statius in the conceit that even his birth-wail was melodious (*ibid.* 36 f. 'natum protinus atque humum per ipsam' primo murmure dulce vagientem').

A suitable context for the line in the *Iliaca* is not hard to imagine. That *Aen.* 8. 703 was the immediate inspiration for it can hardly be doubted.³ Now this occurs in the description of the shield of Aeneas, and it would be natural enough for Lucan to include in his theme a description of the shield of Achilles, with the models of the *Iliad* and the *Aeneid* before him (*Il.* 18. 535-8 underlies *Aen.* 8. 700-3).

Little remains of the *Iliaca*, but the longest fragment recurs in an adapted form in the *Bellum Civile*:

haud aliter raptum transverso limite caeli
flammati Phaethonta poli videre deique,
cum vice mutata totis in montibus ardens
terra dedit lucem caelo natura que versa.⁴

(*Il.* fr. 2 Hosius)

¹ There is a slight doubt about the exact title. Many modern scholars prefer *Iliakon*, the form used by the two ancient authorities who mention the work by name. But in Vacca's list of titles genitives and nominatives are mixed (e.g. 'epistolarum ex Campania'); and Lactantius may be making the same mistake as the scholiast on Pers. 1. 121, who calls Nero's *Troica* 'Troicon'. A singular in such a case seems unparalleled—unless it be by Lucan's own *Catachthonion* (itself a gen. pl.? Q has *KATAXΘONION*: misplaced erudition? But note Lact. *ad Theb.* 9. 424; 'Lucanus in catachthonio').

² The Roman practice of delivering a child on the ground is well attested: cf. *Silv.* 1. 2. 109 f.; 5. 5. 68 f.; *Lucr.* 5. 222 ff.; *Macrob. Sat.* 1. 12. 20: 'vox (of which the *primus vagitus* would be the symptom) nascenti homini terrae contactu datur'. Other passages are quoted by H. Wagenvoort, *Roman Dynamism*, p. 18, n. 3.

³ The train of Seneca's thought may have run thus: his mention of the ransoming of Hector reminded him of his nephew's recent recitation on that theme. Then, when in

chapter 35 he meditated a poetic simile for Anger he thought of this line from the poem; but this recalled its model and the preceding line from the *Aeneid*. So would come the 'coincidence' that Bellona is conjoined with Discordia in Seneca as she is in Virgil.

⁴ The inspiration for this simile came from Ovid's description of Phaethon's drive (*Met.* 2. 1-332). Scaliger's emendation of *flammati* (l. 2) to *flammatum*, though receiving some support from Cat. 64. 291 (*flammati Phaethontis*)—cf. *Ov. Met.* 2. 319 ff.—is not necessary: it can qualify *caeli* (cf. *succendit aethera* in the corresponding passage of the *B.C.*), or even *poli* (though this is less likely: the poles nearly catch fire in Ovid (295 'fumat uterque polus'), but this is because the *terrestrial* conflagration threatens to ignite them and so bring down the *machina mundi*). *Totis in montibus ardens terra*: cf. *Met.* 2. 216-26 for the thought; for the diction, *Man.* 2. 420 ('nudusque in colibus orbis'). It will be noticed that, though Lucan repeats the words *transverso limite* in the second passage, there the *limes* is oblique in a vertical direction to the sun's proper course (*primum*—Duff (Loeb

cumque diem pronum transverso limite ducens
succendit Phaethon flagrantibus aethera loris,
gurgitibus raptis penitus tellure perusta.

(B.C. 2. 412 ff.)

So there is evidence that Lucan in later life had not forgotten his earliest effort.

If my suggestion is correct, Seneca here is indulging in a little mild humour when he classes the young nephew of Novatus and himself with Virgil. The joke would be appreciated by the family, who would know who the second 'bard' was. Seneca's humorous intention is indicated by his use of the word *vates*; elsewhere he applies it seriously and appropriately to Virgil in quoting one of his oracular pronouncements,¹ but it is high-flown when introducing merely descriptive verse as in the passage under consideration. Any versifier of the Silver Age would affect and welcome the title *vates*, with its connotation of divine inspiration, but as a mere equivalent of *poeta* it is a grandiose word in prose (compare Aper's little sneer in Tacitus' *Dialogus* (9. 2): 'egregium poetam vel, si hoc honorificentius est, praeclarissimum vatem').²

While I am convinced that these lines are by different authors, my suggestion that one of these authors was Lucan would lose what attractiveness it may possess were the second book of the *de ira* to be dated before Seneca's return from exile. It would of course be perfectly possible for Seneca while in Corsica to be sent a copy of his nephew's work, but my thesis presupposes that Seneca was aware that his brother knew this work too: a condition that would be most easily met by supposing that Lucan gave a family recital of the *Iliaca* when both Seneca and Novatus were present. Also, precocious though Lucan was, I find it hard to stomach such precocity in a child much under ten. But this may be mere prejudice.

The date of the *de ira* can be fixed between two events: the death of Caligula and the adoption of Novatus by Iunius Gallio. The year A.D. 49 has found at least two advocates,³ but more scholars have preferred 41 (Schanz-Hosius, ii. 686-7). This preference appears to be grounded on three⁴ supports: (a) In 3.

ed.) is right, Haskins and Bourguery wrong: cf. *Met.* 2. 206 ff.); here it is in a lateral, in the direction of the pole (hence *poli videre*).

¹ *Dial.* 10. 9. 2: 'clamat ecce maximus vates et velut divino ore, instinctu salutare carmen canit: optima quaeque dies miseris mortalibus aevi prima fugit'. Seneca quotes these lines again (*Ep.* 108. 26) with the preambule 'inhaereat istud animo et tanquam missum oraculo placeat'.

² Apposite, as K. J. Dover has pointed out to me, is the deliberately high-flown passage in Pliny (*Ep.* 8. 4. 5): 'proinde iure vatum invocatis dis et inter deos ipso, cuius res, opera, consilia dicturus es, immitte rudentibus, pande vela ac, si quando alias, toto ingenio vehere! cur enim non ego quoque poetice cum poeta?'

³ The later, L. Hermann, in his article on the chronology of Seneca's prose works (*Latomus*, i (1937), pp. 94 ff.), sums up his discussion of the date of the *de ira* with these words (p. 96): 'Non seulement il faut dater

le troisième livre d'après l'exil, mais encore il faut admettre que tout l'ouvrage a été écrit vers 49 ap. J.-C.'

⁴ Nothing can be built on a comparison of *de ira* 1. 4. 1 with Suet. *Claud.* 38. 1. There Seneca distinguishes between *ira* ('anger') and *iracundia* ('irritability', a character of the temperament); Suetonius says that Claudius 'irae atque iracundiae conscius sibi, utramque excusavit edicto distinctisque, pollicitus alteram quidem brevem et innoxiam, alteram non iniustam fore'. An edict of this nature might well have been made by Claudius at the beginning of his principate on the analogy of the praetorian *edictum perpetuum*; but it was not based on a knowledge of the *de ira*, as some would have it (Schanz-Hosius, loc. cit.). Apart from the fact that the particular distinction given above is not Seneca's own invention (cf. Cic. *T.D.* 4. 27), it was by no means always observed (even by Seneca himself in this very work—e.g. 2. 14. 1), and obviously Claudius is using a different one—

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48

18. 3 the word *modo* ('quid antiqua perscrutor? modo C. Caesar' etc.). But in Livy 6. 40. 17 and 22. 14. 13 the word is used of events over twenty years old.¹ (b) There is no mention in the *de ira* of Seneca's exile, but if he were writing after his return in the lifetime of the emperor who had banished him Seneca might well have felt that the topic was better left alone. Indeed, in his one mention of *exilium* in this work one could just as well discern tactful handling of a delicate subject: among the enormities which Anger perpetrates the exiling of its victims is not enumerated; rather an ill-judged word spoken under the influence of Anger has often brought exile upon the speaker.² (c) The age of the rhetorician Gallio when he adopted Novatus. All we know at present is that this adoption had taken place by A.D. 52. The elder Gallio's association with Messalla Corvinus (Sen. *Suas.* 3. 6) makes it difficult to place his birth-date later than 30 B.C.³ This would make him at least eighty when he adopted Novatus, if this did not occur until A.D. 50 or 51. If the adoption were by *adrogatio* in the normal way it is unlikely that it would have been so long delayed. But we do not know that it was performed in this manner, in Gallio's lifetime: it may have been *per testamentum*, in which case Gallio's age would present no difficulty. One would expect an ordinary adoption to be effected when the adopter was not much older than sixty. But Novatus had certainly not been adopted by A.D. 40, by which time Gallio must have been at least seventy: so probability points to a testamentary adoption.

The question may be asked, would Seneca have involved the great name of Virgil in such banter? There are several reasons why I think it possible. First, though Seneca's respect for Virgil was great, it stopped short of awe: the tone, for instance, of his defence of Virgil's 'shortcomings' (*Epp.* 86. 15 f.; fr. 113 Haase) seems patronizing rather than reverent. Anyway, his purpose here would not be to mock Virgil but to flatter and please his young nephew, who he could be sure would read the work addressed to his other uncle (Seneca's success in this aim may be reflected in Lucan's decision to preserve the great line in his *magnum opus*). Second, it is much in Seneca's manner to be light-hearted in his references to the great men of the past; it is for the great men of the present that his unswerving deference is reserved. Lastly, this was a joke private to the family: Seneca would not have expected a boy of ten or eleven to publish his work to the world; nor in fact did Lucan ever publish it himself.⁴

between deeply felt anger, which would be merited, and mere outbursts of bad temper (*iracundia*), which would be short-lived and innocuous. *Brevis* would be a strange adjective to apply to a natural propensity.

¹ Dr. G. E. F. Chilver has drawn my attention to Sen. *Dial.* 10. 18. 5—*modo modo* referring to Caligula in a work dated between 48 and 50. This is better than the Livian examples.

² 2. 14. 3-4: 'saepe itaque ratio patientiam suadet, ira vindictam, et qui primis defungi malis potuimus, in maiora devolvimur. quosdam unius verbi contumelia non aequo animo lata in exilium proiecit', etc.

³ P.-W.³ x. 1035 favours c. 33 B.C.

⁴ Lucan's first published work was the *Laudes Neronis*, recited at the Neronia of A.D. 60 ('prima ingenii experimenta in Neronis

laudibus dedit quinquennali certamine' Suetonian *Life*). This was followed by the extemporary *Orpheus* and three books of the *Bellum Civile* ('dein civile bellum recitavit', Suet.; 'quippe et certamine pentaeterico . . . laudibus recitatis in Neronem fuerat coronatus et ex tempore Orpheia scriptum in experimentum adversum conplures ediderat poetas et tres libros, quales videmus. quare inimicum sibi fecit imperatorem', Vacca; cf. Stat. *Silv.* 2. 7. 58 f.). The jealousy of the emperor now forbade further publication ('interdictum est ei poetica', Vacca). I take the distinction made by Vacca between the aforementioned poems and the rest of the works—the remainder of the *Bellum Civile* and the works listed after the introductory 'extant eius conplures et alii, ut Iliacon', etc.—to indicate that these were not published by

I am well aware that, short of the rediscovery of the *Iliaca*, I can adduce no compelling support for my speculation. But the astonishing fact remains that the original of the only known line-long plagiarism in the *Bellum Civile* happens to have been miraculously preserved, from an anonymous author, by Lucan's uncle Seneca.

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Lucan himself. This was presumably done after Nero's death by Lucan's widow Polla, the only member of the family, apart from Acilia, to survive the failure of the Pisonian conspiracy and its aftermath. But we cannot be sure that all was then given to the world: the whole of the *Bellum Civile* was undoubtedly available to the public in the early Flavian era, for Valerius Flaccus has obvious reminiscences of the later as well as the earlier books; but it would be rash to assume too readily that the works listed at the end of Vacca's *Life* were equally accessible at that time (*Iliaca*, *Catachthonia* (?)—another work of early youth: Stat. *Silv.* 2. 7. 54-57—*Silvae*, *Medea*, *salicae fabulae*—no doubt to be dated to the period of Lucan's intimacy with Nero, in view of the emperor's accomplishment as a ballet dancer—*epigrammata* (?), in *Octavium Sagittam et pro eo orationes*—probably composed in 58, from the topicality of the subject; clearly academic *controversiae*, in which Lucan excelled ('declamavit et graece et latine cum magna admiratione audientium',

Vacca)—*de incendio urbis*, *epistulae*). The *Vaccan Life* shows signs of deriving from a source near to Lucan in time and kin. Statius, who is acquainted with the contents of some of these works, was a friend of Polla and could have had access to them through her; the same can be said of Martial, who quotes a pentameter of Lucan in a poem addressed to the widow (10. 64). It is noteworthy that otherwise the only mention or quotation of any of these works is to be found in Lactantius the commentator on Statius' *Thebaid* (apart from a Lucanian epigram (?) given by Vincent of Beauvais). We may suppose that the *carmen famosum in Neronem*, mentioned by Suetonius but not by Vacca, was given some sort of currency by Lucan himself; the same could be supposed of the prose *de incendio urbis*, in which Lucan accused Nero of firing Rome (Stat. *Silv.* 2. 7. 60 f.; cf. Tac. *Ann.* 15. 38), if it was a political pamphlet; but it would still be in a somewhat different class from the other published works.

STRABO AND THE ΚΛΙΜΑΤΑ

Λοιπόν εἰπεῖν περὶ τῶν κλιμάτων, ὅπερ καὶ αὐτὸ ἔχει καθολικὴν ὑποτύπωσιν . . . τοῖς μὲν οὖν ἀστρονομικοῖς ἐπὶ πλέον τοῦτο ποιητέον, καθάπερ Ἰππάρχος ἐποίησεν. ἀνέγραψε γάρ, ὡς αὐτὸς φησι, τὰς γυνομένας ἐν τοῖς οὐρανίοις διαφορὰς καθ' ἕκαστον τῆς γῆς τόπον τῶν ἐν τῷ καθ' ἡμᾶς τεταρτημορίῳ τεταγμένων, λέγω δὲ τῶν ἀπὸ τοῦ ἰσημερινοῦ μέχρι τοῦ βορείου πόλου . . . ἀλλ' ἀρκεῖ τὰς σημειώδεις καὶ ἀπλουστεράς ἐκθέσθαι τῶν ὑπ' αὐτοῦ λεχθεισῶν, ὑποθεμένοις, ὥσπερ ἐκεῖνος, εἶναι τὸ μέγεθος τῆς γῆς σταδίων εἴκοσι πέντε μυριάδων καὶ δισχιλίων, ὡς καὶ Ἐρατοσθένης ἀποδίδωσιν· οὐ μεγάλη γὰρ παρὰ τοῦτ' ἔσται διαφορὰ πρὸς τὰ φαινόμενα ἐν τοῖς μεταξὺ τῶν οἰκίσεων διαστήμασιν. εἰ δὲ τις εἰς τριακόσια ἐξήκοντα τμήματα τέμναι τὸν μέγιστον τῆς γῆς κύκλον, ἔσται ἑπτακοσίων σταδίων ἕκαστον τῶν τμημάτων· τούτῳ δὴ χρῆται μέτρῳ πρὸς τὰ διαστήματα τὰ ἐν τῷ λεχθέντι διὰ Μερόης μεσημβρινῷ λαμβάνεσθαι μέλλοντα. ἐκεῖνος μὲν δὴ ἄρχεται ἀπὸ τῶν ἐν τῷ ἰσημερινῷ οἰκούντων, καὶ λοιπὸν αἱ δι' ἑπτακοσίων σταδίων τὰς ἐφεξῆς οἰκίσεις ἐπιὼν κατὰ τὸν λεχθέντα μεσημβρινὸν πευράται λέγειν τὰ παρ' ἑκάστοις φαινόμενα. (Str. 131-2.)

In a recent paper¹ I discussed the origin of the concept of the *climata* in Greek geography, and adduced reasons for attributing the formulation and elaboration of the concept to Hipparchus (fl. 150 B.C.). The above passage in Strabo was naturally mentioned in the course of the argument, and I drew attention in a footnote² to the unsatisfactory nature of the account given by him of the *climata*. I now propose to examine the passage in more detail.

First it should be emphasized that Strabo is no mathematician. Certainly he stresses the importance of some mathematical, and particularly astronomical, knowledge for the geographer,³ but this need only be of a very general and superficial kind.⁴ His own geographical work, he tells us, is expressly designed to be of use to the statesman and man of affairs, who has had the usual upper-class education,⁵ in order to keep him abreast of the increase in geographical knowledge resulting from the campaigns of Alexander in the east and those of the Romans in western Europe and against Mithridates Eupator and Parthia.⁶ His distrust of his own ability to deal with the more mathematical side of the subject is implicit in his warning that his account of the *climata* is only a 'general outline' (ὅπερ καὶ αὐτὸ ἔχει καθολικὴν ὑποτύπωσιν), that the subject is not treated as fully as the astronomers should treat it (τοῖς μὲν οὖν ἀστρονομικοῖς ἐπὶ πλέον τοῦτο ποιητέον, καθάπερ Ἰππάρχος ἐποίησεν) because it is 'dry reading' (περισκελεῖς) for the politician who only needs a general knowledge of mathematical geography, and finally that he is only going to enumerate the simplest and most obvious of the results obtained by Hipparchus (ἀλλ' ἀρκεῖ τὰς σημειώδεις καὶ ἀπλουστεράς ἐκθέσθαι). That this distrust was fully justified is amply evidenced by Strabo's long, involved, and often contradictory defence of Eratosthenes against the criticisms of Hipparchus,⁷ a detailed analysis of which

¹ C.Q. xlix, pp. 248-55.

² Ibid. n. 2, p. 252.

³ Str. 11 (i. 1. 20) ff.: cf. 13.

⁴ Str. 12 (especially i. 1. 21).

⁵ Str. 13 (i. 1. 22)—this subservience to practical ends is typical of the new spirit

introduced by the Romans into scientific inquiry, and is very different from the disinterested searching after truth of the earlier Hellenistic savants such as Hipparchus.

⁶ Str. 14 (i. 2. 1).

⁷ Str. 68-90 *passim*.

shows Strabo becoming hopelessly confused in the figures he quotes for various distances; he even has the temerity to criticize Hipparchus, who was a brilliant mathematician,¹ for being too mathematical in his approach to geographical problems.² Hence it is not surprising that Strabo's account of the *climata* should be misleading and incorrect on a number of points, as will be demonstrated.

Now Strabo tells us that Hipparchus described the celestial phenomena for all the regions of the earth between the equator and the north pole, that he divided the total circumference of the globe into 360°, and that, assuming Eratosthenes' figure of 252,000 stades for this circumference, he 'tries to state' (*πειρᾶται λέγειν*) the celestial phenomena for each locality, starting from the equator and working along the line of the meridian through Meroë³ towards the pole at fixed intervals of 700 stades or 1° (252,000 ÷ 360).

There are several difficulties here. To begin with, it is obvious that such a table is purely theoretical; the mere fact that it went from the equator to the north pole shows that it was based on calculation and not on observation. Yet Berger, to whose critical edition of the extant fragments of Hipparchus' geographical work⁴ I am greatly indebted, accepts Strabo's account at its face value and assumes that Hipparchus drew 90 parallels of latitude on the terrestrial sphere and described the different celestial phenomena for each.⁵ Now Ptolemy in the *Almagest* (lib. 2, cap. 6) gives a list of 39 parallels of latitude in all (including the equatorial parallel), for each of which he states the length of the longest day, the latitude in degrees north of the equator, and (except for the parallels north of 58°) the gnomon ratios at the solstices and the equinoxes. Of these 39, only 29 are connected with named localities on the earth about which some information, however vague, was available—and this number includes Thule and the 'unknown Scythians'. If Ptolemy, who lived some 300 years after Hipparchus and possessed all the additional geographical information discovered as a result of the Roman conquests, could yet only designate 29 parallels from about latitude 4° (Taprobane, i.e. Ceylon) to 64° ('the unknown Scythians') by the names of the regions through which they passed, then certainly it was a totally impossible task for Hipparchus to list 90 parallels, as Strabo and Berger assume he does.

Furthermore, all the evidence tends to show that Hipparchus did not draw his own map of the world;⁶ his chief concern in his geographical work was to draw attention to the discrepancies in Eratosthenes' proposed 'corrections' of the traditional map, and to insist on the necessity for the accumulation of much more scientific data before a new map could be constructed.⁷ Until such data, of a type that would satisfy his own strict standards of accuracy and trustworthi-

¹ In addition to his purely astronomical works he wrote treatises entitled *On Chords in a Circle*, *On Parallax*, *On Objects carried down by their Weight*, *On the Length of the Year*, and *On Intercalary Months and Days*. There are also hints of works on algebra, on the theory of numbers, and on optics.

² φησὶ τὴν μὲν πλείω θεωρίαν ἔσεσθαι μαθηματικὴν, ἐπὶ ποσὸν δὲ καὶ γεωγραφικὴν οὐδ' ἐπὶ ποσὸν μέντοι δοκεῖ μοι ποιήσασθαι γεωγραφικὴν, ἀλλὰ πᾶσαν μαθηματικὴν, Str. 94; cf. 92-93.

³ This line was roughly the equivalent for ancient geographers of our 'meridian of

Greenwich', and was taken as passing through Meroë, Alexandria, Rhodes, and the mouth of the Borysthenes (modern Dnieper); cf. Str. 62 (i. 4. 1). It formed the basic meridian for Eratosthenes' map. How it corresponded with the true meridian of Alexandria may be seen from the map on p. 164 of Thomson's *History of Ancient Geography*, 1948.

⁴ E. H. Berger, *Die geographischen Fragmente des Hipparch*, 1869.

⁵ Op. cit., pp. 29-30.

⁶ Op. cit., pp. 73 ff.

⁷ Cf. Str. 68-69; 71.

ness, were available in quantity, he did not think it worth while even to attempt to draw a new map—an attitude which led him to reject Eratosthenes' proposed alterations even when these, by a kind of inspired guesswork, led in fact to a truer picture of the *οἰκουμένη*.¹ Yet if he is to be credited with having drawn 90 parallels of latitude, he would presumably have embodied his own data instead of those of Eratosthenes which he criticized, and therefore, to some extent anyway, would have been redrafting the world map according to his own ideas, which is precisely what he did not do, as Berger realized.

Thus the first fact that emerges clearly is that, when Strabo tells us that Hipparchus gave the celestial phenomena for all the regions from the equator to the north pole, he is really referring to an astronomical table and not to a list of terrestrial latitudes like that given by Ptolemy in *Almag.* ii. 6. This astronomical table was, of course, purely theoretical. Strabo says that it progressed in steps of 1° (700 stades), but it is hardly conceivable that this is correct, since the celestial phenomena would not have altered sufficiently in a change of latitude of only 1° to make it worth while recording them, particularly as 400 stades was regarded as the minimum distance for changes in the horizon to become perceptible;² it can easily be calculated that in the latitude of Rhodes, for example, a change of 1° in latitude makes a difference of only 6 minutes in the length of the longest day, an amount which would be barely measurable on the instruments used by the ancients.³ Hence Berger's 90 parallels are quite out of the question. It is much more likely that the table progressed by uniform steps in the length of the longest day, as in fact Ptolemy's table does.⁴ Here it may be noted that Strabo generally reports the longest day as the first of the data he gives for a particular Hipparchian parallel, and this would be consistent with the idea that the first column in the table gave this datum.

In this astronomical table, then, Hipparchus gave for a number of parallels on the theoretical earth globe (not for every degree as Strabo erroneously says) from the equator to the north pole, or rather for those between 0° and 66° ,⁵ the relevant celestial phenomena, such as the rising times of the zodiacal signs, the relative positions of the fixed stars and constellations (e.g. what stars reached the zenith at that particular parallel and what stars were always visible or invisible there), the ratios of the gnomon to its shadow at the solstices and equinoxes, the height of the sun and of the north pole, the length of the longest day—all calculated theoretically. There is a probable allusion to a Hipparchian table of this type in Ptolemy's *Geography*, when, enumerating the data he is going to give for his *ἐπίσημοι πόλεις*, he says that he would also have added what fixed stars reached the zenith at particular localities, but for the fact that the phenomenon of the precession of the equinoxes made it useless to

¹ Cf. Thomson, *op. cit.*, pp. 205-7.

² Geminus, *Isag.* v. 58; xvi. 17 (ed. Manitius); Heidel, *The Frame of the Ancient Greek Maps*, 1937, p. 125; cf. *C.Q.* xlix, p. 252.

³ See my paper 'Ancient Astronomical Instruments', *Journal of the British Astronomical Association*, vol. 64, Jan. 1954.

⁴ This progresses at first in steps of $\frac{1}{4}$ hour (producing a gradually decreasing difference in the actual degrees of latitude from over 4° at first to just 1° at the end), then $\frac{1}{2}$ hour, and

finally whole hours.

⁵ Of course, beyond 66° —the arctic circle in the modern sense—the concept of rising times breaks down and only a few theoretical data would have been given; but there is no reason why Hipparchus, as Strabo says, should not have continued his table up to the north pole, for Ptolemy continues his list of latitudes in *Almag.* ii. 6 up to this point 'as a matter of theoretical interest' (*θεωρίας ἕνεκεν*).

give such information, since the stars themselves gradually changed their positions relative to the zenith of a particular latitude;¹ when Hipparchus wrote his geographical work he had not yet discovered the effect of precession. Such a table is the source of the astronomical data that Strabo occasionally gives in his account of the Hipparchian *climata*,² and it is to his limited selection of such data that he refers when he says ἀλλ' ἀρκεῖ τὰς σημειώσεις καὶ ἀπλουστεράς ἐκθέσθαι.

The rest of the data that Strabo reports in 132-6 must have been derived from a second table or list, consisting of two or three columns, giving the names, degrees of latitude, and perhaps the stade distances along the main meridian³ of those *climata* only which Hipparchus regarded as being scientifically determined. By relating all the available trustworthy information about the appearance of the heavens, gnomon ratios, sun heights, and longest days where reported for definite localities, to the relevant parallels in the astronomical table, he was enabled to determine the latitude of the place of observation on the basis of 700 stades to 1°, the ratio which resulted from his acceptance of Eratosthenes' figure for the circumference of the earth. The number of latitudes that could be determined in this way was, unfortunately, very small,⁴ and Strabo gives most of them; these formed the latitude table proper, which was methodologically distinct from the purely theoretical table giving the astronomical data. This explains why it is that, whenever Strabo reports Hipparchus' acceptance of Eratosthenes' figure, he, or rather Hipparchus himself since Strabo is probably quoting his actual words, invariably emphasizes the fact that it is only a provisional acceptance. In Str. 62 the qualifying words are μικρὸν παραλλάττειν φήσας παρὰ τὴν ἀλήθειαν, in 113 οὐ γὰρ πολὺ διοίσειν πρὸς τὰ φαινόμενα τῶν οὐρανίων καθ' ἐκάστην τὴν οἰκίσιν οὕτως ἔχειν τὴν ἀναμέτρην, ἢ ὡς οἱ ὕστερον ἀποδεδώκασιν, and in 132 οὐ μεγάλη γὰρ παρὰ τοῦτ' ἔσται διαφορά πρὸς τὰ φαινόμενα ἐν τοῖς μεταξὺ τῶν οἰκίσεων διαστήμασιν. The repeated assertion that it will not make much difference πρὸς τὰ φαινόμενα as to which figure is accepted, must mean that Hipparchus hoped that it would only be a matter of time before the true figure was evaluated, since this was bound to happen as soon as a sufficient number of astronomical observations was available for different localities. Meanwhile Eratosthenes' figure could be used provisionally for evaluating latitudes in terms of stades, but Hipparchus would not, of course, need it for his astronomical table.

Under the circumstances it is difficult to see what else Hipparchus could have done; only when sufficient scientific data were available, of the trustworthy type that he insisted on, would it be possible to draw up a detailed table of latitudes from the equator to the north pole. Until then all he could do was to make a beginning of the work, and indicate the lines on which it ought to be carried out. Strabo in his cursory survey of that side of his subject which he liked least, i.e. the mathematical side, mistakenly credits Hipparchus with having actually carried out what in fact he only foreshadowed,⁵ and does not

¹ Geogr. 8. 2. 2-3.

² Str. 132 ad fin., the visibility of the Little Bear in the 'Cinnamon-producing region'; Str. 133, the position of the Great Bear at Syene, and of Arcturus at Alexandria; Str. 134, the position of stars in Cassiopeia and Perseus.

³ Strabo gives the stade distances and the

lengths of the longest days to designate latitude, but Hipparchus almost certainly used degrees and not stade distances: cf. *Comm. in Arat. lib. 1, cap. 3.*

⁴ Cf. Ptol. Geogr. 1. 4. 2.

⁵ The words πειράται λέγειν ('Ἰππάρχος) τὰ παρ' ἐκάστοις φαινόμενα perhaps give a hint of this.

make it clear (except by implication) that he is deriving his data indiscriminately from *two* tables set out by Hipparchus, each of a different type as shown above. Not only this, but in his confused account of the Hipparchian *climata* he includes data from other sources, particularly stade distances taken from Eratosthenes, as though they also were derived from Hipparchus. Berger,¹ despite his failure to realize the true nature of Hipparchus' tables, rightly points out that the distances given by Strabo should tally with the figure in degrees obtained from the astronomical table on the basis of 700 stades to 1° , and that no stade distance could be allowed in Hipparchus' table which did not agree with the astronomical data. When such discrepancies occur, provided they are greater than the allowed margin of error of 400 stades, they are to be attributed to Strabo himself, either as a genuine mistake on his part, or as an instance where he deserts Hipparchus' figure in favour of Eratosthenes' or some other source's.

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¹ *Hipp.*, pp. 41 ff.

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